

# MISSION SUPPORT ALLIANCE

"WE WILL MEASURE OUR SUCCESS BY OUR CUSTOMERS' SUCCESS"



# Monthly Performance Report September 2017

**W. K. Johnson**  
**President**

U.S. Department of Energy  
Contract DE-AC06-09RL14728



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# ACRONYMS LISTING



This list of acronyms is intended as a reference for the reader to provide definitions that are not readily available away from the Hanford Site.

## TERMS

AMB	Assistant Manager for Business and Financial Operations
AMMS	Assistant Manager for Mission Support
AMRP	Assistant Manager for River and Plateau
AMSE	Assistant Manager for Safety and Environment
BCR	Baseline Change Request
BO	Business Operations
CHPRC	CH2MHILL Plateau Remediation Company
CTD	Cost-to-Date
CV	Cost Variance
DART	Days Away Restricted Transferred
DLA	Direct Labor Adder
DOE	U.S. Department of Energy
ECOLOGY	State of Washington, Department of Ecology
EM	Office of Environmental Management
ES	Emergency Services
ES&H	Environment, Safety, and Health
FY	Fiscal Year
FYTD	Fiscal Year to Date
HAMMER	Volpentest Hazardous Materials Management and Emergency Response Training and Education Center
HCAB	Hanford Contract Alignment Board
HLAN	Hanford Local Area Network
HQ	Headquarters
HR	Human Resources
HRIP	Hanford Radiological Instrumentation Program
HSPD	Homeland Security Presidential Directive
IH	Industrial Hygiene
IM	Information Management
IIP	Integrated Investment Portfolio
ISAP	Infrastructure and Services Alignment Plan
ISMS	Integrated Safety Management System
LMSI	Lockheed Martin Services, Inc.
MSA	Mission Support Alliance, LLC

# ACRONYMS LISTING



MSC	Mission Support Contract
NEPA	National Environmental Policy Act
OCCB	Operational Change Control Board
ORP	Office of River Protection
PFM	Portfolio Management
PFP	Plutonium Finishing Plant
PMB	Performance Measurement Baseline
PMTO	Portfolio Management Task Order
PNNL	Pacific Northwest National Laboratory
PO	Presidents Office
POSP	Parent Organization Support Plan
PPE	Personal Protection Equipment
PTA	Patrol Training Academy
PW	Public Works
RHP	Risk Handling Plan
RL	Richland Operations Office
SAS	Safeguards & Security
SS&IM	Site Services and Interface Management
SV	Scheduled Variance
T&CO	Training and Conduct of Operations
TRC	Total Recordable Case
UBS	Usage-Based Services
VoIP	Voice over Internet Protocol
VPP	Voluntary Protection Program
WBS	Work Breakdown Structure
WRPS	Washington River Protection Solutions, LLC



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## 1.0 INTRODUCTION

The Executive Overview section is intended to provide an executive-level performance overview. Included herein are descriptions of Mission Support Alliance, LLC's (MSA) significant accomplishments considered to have made the greatest contribution toward safe, environmentally sound, cost-effective and mission-oriented services; progress against the contract with U.S. Department of Energy (DOE) Richland Operations Office (RL); project cost summary analysis; and overviews of safety. Unless otherwise noted, all data provided is through September 2017.

### 1.1 KEY ACCOMPLISHMENTS

**Safeguards and Security Star of Excellence Award** – MSA Safeguards and Security received the “Star of Excellence” award at the 33<sup>rd</sup> Annual National Voluntary Protection Program Participants Association (VPPPA) Symposium in New Orleans, LA. The “Star of Excellence” is awarded to the DOE sites who have gone above and beyond the Voluntary Protections Program (VPP) Star requirements, and have a recordable incident injury rate that is 75%% better than the average of industry code.

**Fiscal Year (FY) 2018 Budget Planning** – RL issued the Fiscal Year (FY) 2018-2019 Contract/Baseline Alignment Guidance (C/BAG) to MSA on July 11, 2017, with a Revision 1 on August 31, 2017. MSA delivered the draft FY 2018-2019 IIP, Reliability Project Investment Portfolio and Unfunded Lists to RL on August 14, 2017. The final FY 2018-2019 IIP was delivered to DOE on September 19, 2017, three days ahead of schedule.

**Usage-Based Services (UBS) Pools Management** – Through September 2017, MSA managed the UBS pools by closely aligning with the other Hanford contractors' project needs. Each month, MSA briefed the other Hanford contractors on the year-to-date UBS performance via monthly Contractor Interface Board (CIB) meetings. At these meetings, MSA's performance is reviewed and contractor service needs are discussed. MSA managed the FY 2017 UBS cost liquidations to 0.6%% of the budgeted cost for the 14 individual service areas, demonstrating exceptional operating performance and management focus.



**Notable Small Business Performance** – MSA’s small business utilization in September continued well above goal in several areas:

September 2017 Small Business Utilization Highlights		
Description	Goal	Actual
Small Business	50.0%	86.3%
Small Disadvantaged	10.0%	19.7%
Small Women Owned	6.8%	22.6%
HubZone	2.7%	14.3%
Small Disadvantaged Service Disabled	2.0%	17.2%
Veteran Owned	2.0%	16.1%

Prime Contract Targets:

- At least 40% contracted out beyond MSA; actual through September: 44.9%
- Small Business 25% of total MSC value; actual through September: 26.4%

Noteworthy accomplishments through September 2017 include placing \$134M to small business with a cumulative value of \$866.8M, exceeding the small business goal by 73%, exceeding the annual Historically Underutilized Business (HUB) Zone goal by 429%%, and exceeding the annual Small Disadvantaged Service Disabled Business goal by 761%%.

**Infrastructure and Services Alignment Plan (ISAP) Annual Update** – The MSA ISAP Program team submitted the *Infrastructure and Services Alignment Plan (ISAP)*, on September 21, 2017. The publicly-released document is a 43-page color booklet, along with 20 web-hosted supporting files on 13 major systems. More than 250 planning stakeholders from seven Hanford Site organizations contributed and cross-validated the planning information. Highlights in this year’s ISAP annual update include Direct Feed Low Activity Waste priority emphasis for the Low Activity Waste Pretreatment System plant start-up target dates, support for tank farm operations, groundwater program data, a consolidated Fleet Services complex, and continued footprint reductions and system transformation. The mission support planning outcomes focus on the target year of FY 2022 as planning support for five-year advanced budgeting. The ISAP submittal

will be formally reviewed by RL and provided as the Hanford Program’s Five Year Site Plan submittal for the period of FY 2018 to FY 2022.

**Hanford Site Tours** – During the month of September, MSA conducted the final two public tours, concluding the 2017 Hanford Site Cleanup Tours. In total, the program hosted 348 visitors with an 86% participation rate for the tour season. Each tour included facility briefings on the Cold Test Facility, 324 Building Disposition Project, 618-10 Project, Plutonium Finishing Plant, 200 West Groundwater Treatment, and the Waste Treatment and Immobilization Plant.

Additionally, VIP tours in September included visitors from the DOE Environmental Management Facilities Extent of Condition Review Integrated Project Review Team; the Washington State House of Representatives Labor and Workplace Standards Committee; and Washington State Congresswoman Suzan DelBene and staff.

**Electrical Utilities Completes Best Year Ever** – Through September, MSA Electrical Utilities (EU) staff completed notable footprint reduction as they cleaned up after major projects and reduced, recycled, and revamped its ecological programs. FY 2017 performance incentive footprint reduction goals were all met, including removal of a three-quarter--mile and an 11-mile line in the 100 Areas; removal of two outdated streetlight circuits, and five zero-load transformers; removal of an unneeded steel-lattice switching structure; and the disconnection and removal of services at the Fuels and Materials Examination Facility and the 234-5 Z plant. Significant progress was also made in recycling oil and transformers and dispositioning legacy radiological equipment.



*Cleanup efforts included removal of electrical lines/components and legacy equipment*

**Carbon Footprint Reduced** – EU installed a new flood lighting circuit at the salt and sand shed in the 200 East Area, enhancing the safety and security of the area. The installation of the new lighting circuit replaced a previous lighting solution that used multiple portable generator powered light plants. Additionally, eliminating the

generator exhaust fumes significantly reduces carbon dioxide emissions, minimizing impacts to the environment.



*New flood lighting circuit installed*

**2017 Road Improvements** – Through September 2017, MSA Public Works’ road crews applied 84 tons of hot/cold mix asphalt to Hanford Site roads to mitigate impacts from severe winter weather. This was over 50 tons more material than normally necessary. In addition, crews completed 52 lane miles of crack seal, well over the 36 lane miles originally planned for FY 2017.

**Pump Safely Removed from Tank** – MSA Crane & Rigging personnel provided assistance to Washington River Protection Solutions (WRPS) as they removed a plugged pump from the AP-106 double-shell tank system. The pump was likely plugged with solid material that had built up over a long period of time. Removing the long length pump presented significant challenges, but Crane & Rigging staff were able to safely remove the pump and package it for transport to the Environmental Restoration Disposal Facility.



*Pump being readied for shipment*

**Water Leak Repair** – Beginning September 13, 2017, MSA Maintenance Services staff, working with personnel from MSA Water Utilities, Fire Systems Maintenance, Crane & Rigging, and Safety & Health, performed a high-priority work scope to excavate and

replace ground valves 32S, 33S, and 34S, and their post indicator assemblies to address a water leak. The repair required a several-day outage to multiple facilities in the 200 East Area. To perform the work scope, the existing piping was removed, a new spool piece installed, and a thrust block poured. Water service was restored to the facilities on Saturday, September 16, 2017.



*Repairing failed water line*

**Annual 3<sup>rd</sup> Party Ladder Testing** – The Hanford Fire Department conducted the annual 3<sup>rd</sup> party Ladder Test and Inspections September 9-11, 2017. Ladder testing is driven by National Fire Protection Association (NFPA) Standard 1932 requirements for the use, maintenance, inspection, and service testing of fire department ground ladders.

*Annual ladder testing in process*



**Installation of 385 Diesel Fire Pump** – Water & Sewer Utilities (W&SU), with assistance from Maintenance Services, began installation of the 385 diesel fire pump. Activities included installing the fuel tank, installing the pump/motor skid and welding it to the baseplate, and preparing the area for the installation of the control panel and field routing of conduit and miscellaneous piping. Installation will continue





throughout October as a top priority to restore this critical piece of fire protection infrastructure for the 300 Area.

**Mitigation Action Plan** – MSA Environmental Integration Services (EIS) staff completed the mitigation plan for the expansion of the Environmental Restoration Disposal Facility (ERDF). An ecological review of ERDF determined that the amount and quality of lost habitat triggered compensatory mitigation requirements. The expanding footprint of ERDF is predicted to impact about 250 hectares (~615 acres) of native habitat that is classified as Level 3 (Important Resources) and Level 4 (Essential Resources) in the Hanford Site Biological Resource Management Plan (BRMP). The loss of this high quality habitat can negatively affect Hanford’s biological resources and the integrity of the Hanford environment. Since such a large area of land is affected, this plan offered mitigation options to act as alternatives to a compensatory re-vegetation. The goal of these mitigation options is to compensate for losses in biological resources caused by the removal of native habitat, thus minimizing the impact of the ERDF expansion.

**SharePoint Environment for Office 365<sup>1</sup> Created** - On Thursday September 7, 2017, MSA IM SharePoint administrators created the final scripts to fully automate the creation of the Hanford SharePoint Online infrastructure. The scripts built out all site collections, which are the top level sites including Titles, URLs, and specified site templates, as well as approximately 200 sub-sites. This accomplished fully automating the Hanford infrastructure for disaster recovery, migration efficiency, and overall consistency.

**Maintenance Management Program Plan** – MSA’s Maintenance Management Program (MMP) completed all milestones in accordance with the success criteria associated with the FY 2017 Roadmap. The MMP also provided RL with a recommendation for a site-wide Computerized Maintenance Management System (CMMS) that will allow for all site contractors/companies to utilize one CMMS, which in turn will provide consistency in tracking and reporting of maintenance and work management activities.

**Contractor Assurance Support** – DOE-RL requested PFM provide DOE-RL with Contractor Assurance System (CAS) support focused on providing development and implementation of site-wide management requirements/standards/systems for Requirements Management and Contractor Assurance Corrective Action/Issues Management. This would provide DOE a CAS that is compliant with DOE Order 226.1B

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<sup>1</sup> SharePoint Office 365, developed by the Microsoft Corporation, Redmond, WA, a web-based, collaborative platform that integrates with Microsoft Office.



and could interface with each of the site contractor's systems. MSA provided a subject matter expert (SME) in CAS to assist in the development of the requirements, specifications, and software evaluations and business case review. PFM delivered the process schedule which included the proposed delivery date for the draft site-wide business standard for CAS approach document and the specification document (vendor capability attributes) to DOE-RL on 9/18/17, 7 days ahead of schedule. The remaining Phase 1 deliverables were moved to FY 2018 per a contract modification.

**Science, Technology, Engineering, and Mathematics (STEM) Students Visit** – MSA hosted a visit at the Volpentest Hazardous Materials Management and Emergency Response (HAMMER) Federal Training Center for approximately 70 STEM high school students on September 20, 2017. The visit provided an opportunity for the students to gain an understanding of career opportunities at Hanford. The students rotated between hands-on respiratory, Hazardous Waste Operations and Emergency Response (HAZWOPER), electrical and radiological worker activity sessions, as well as viewing Hanford Patrol and Hanford Fire Department demonstrations.

**Veteran Success Training Workshop** – HAMMER provided support for DOE-headquarters personnel as they conducted a veteran success training workshop at HAMMER on September 20-21, 2017. Attendees included DOE Office of River Protection (ORP) and RL personnel, as well as Office of Science federal employees.

**Hanford Speakers Bureau Program** – The Speakers Bureau program concluded Fiscal Year 2017 with one presentation in Washington and two in Portland, Oregon. For this fiscal year, nearly 2,174 people attended 63 presentations given to schools, civic organizations and specialty groups in Washington, Oregon and Idaho. The presentations were completed by speakers from RL and ORP.

**Benefits Accounting Meets Major Milestones** – MSA Benefits Accounting Department personnel successfully completed submittal of Form 5500 and 8955-SSA Filings. The Form 5500 filings for the Hanford Site Pension Plan, Hanford Site Savings Plans, Hanford Employee and Retiree Welfare Plans, Hanford Guards Union Income Protection Plan, and the MSA Market Based Welfare Plan were submitted to the U.S. Internal Revenue Service (IRS) ahead of the filing deadline. In addition, the Form 8955-SSA filings for the Hanford Site Pension and Savings Plans were also submitted to the IRS ahead of schedule.

**Labor Relations completes Memorandum of Agreement** – In September, the MSA Labor Relations Department executed a Memorandum of Agreement (MOA) with the Hanford Atomic Metal Trades Council (HAMTC) and International Brotherhood of

Electrical Workers (IBEW) Local 77 unions. The MOA defines the process for the unique requirement of hiring electricians and instrument specialists for the MSA Technical Security Group who will require a Q clearance.

## 1.2 LOOK AHEAD

**Site Storage and Infrastructure Refresh Project** – MSA’s IM organization has committed to upgrade and refresh site storage hardware. This operational project aims to reduce the IT footprint at Hanford and provide better performance to users by taking advantage of the latest advances in storage technology. Storage has been procured, received, racked and configured. Data migration for all hosted desktops and databases is being planned.

**New Central Plateau Water Treatment Facility** – On September 14, 2017, MSA Water and Sewer Utilities (W&SU) personnel met with vendor representatives regarding the design of the new Central Plateau Water Treatment Facility (CPWTF). The CPWTF is an important Hanford project because it will not only provide potable water for the Hanford Site but will be the primary source of process water for all phases of the Waste Treatment Plant. This project will be a multiyear project from design to water production, and W&SU will be an integral component of the CPWTF success.



*Component of new CPWTF*



## 2.0 ANALYSIS OF FUNDS

Table 2-1. Mission Support Alliance, LLC Funds Management (dollars in thousands).

Funds Source PBS	Title	MSA Expected Funding	* Funds Received	FYTD Actuals	Remaining Available Funds from Funds Received
ORP-0014	Radiological Liquid Tank Waste Stabilization and Disposition Operations	\$721.8	\$396.6	\$(59.4)	\$456.0
HSPD (RL11,12,13,30)	Homeland Security Presidential Directive 12	\$1,143.8	\$1,144.0	\$1,144.0	\$-
RL-0020	Safeguards & Security	\$75,653.0	\$88,183.7	\$68,885.7	\$19,298.0
RL-0040	Reliability Projects/HAMMER/ Inventory	\$23,747.9	\$26,278.2	\$20,547.9	\$5,730.3
RL-0201	Hanford Site-Wide Services	\$18,916.4	\$29,416.0	\$8,130.7	\$21,285.3
RL-0041	B Reactor	\$6,137.6	\$6,531.8	\$2,352.6	\$4,179.2
SWS	Site-Wide Services	\$206,019.8	\$236,452.7	\$197,785.5	\$38,667.2
<b>Total</b>		<b>\$332,340.3</b>	<b>\$388,403.0</b>	<b>\$298,787.0</b>	<b>\$89,616.0</b>

EAC = Estimate at Completion  
HSPD = Homeland Security  
Presidential Directive 12

FYTD = Fiscal Year to Date.  
HAMMER = Volpentest HAMMER Federal Training Center  
PBS = Project Baseline Summary.

SWS = Site-Wide Services.

\* Funds received through Contract Modification 641, dated October 12, 2017

Based upon FY17 actuals the remaining uncosted carryover balance will fund SWS through December 7, 2017 and RL20 through January 11, 2018.



## 3.0 SAFETY PERFORMANCE

During the month of September, MSA experienced three injuries that were classified as recordable; two of the three were also classified as Days Away, Restricted or Transferred (DART). As a result, MSA concluded FY 2017 with a total recordable case (TRC) rate of 0.67, and a DART rate of 0.48. Both the TRC and DART rates are below the EM performance goals of 1.1 and 0.60, respectively.

While ending the fiscal year with a bit of a negative trend, the total recordable injuries for FY 2017 were 30% less than FY 2016. However, DART cases have remained somewhat consistent over the last nine months. Overall, FY 2017 was an improvement over FY 2016, with three fewer DART cases and a lower overall rate.

During the past few months, first aid cases have continued to increase, with eleven reported in September. Although total first aid cases increased slightly in FY 2017, this was not unanticipated because MSA's increased focus on reporting all injuries continued throughout FY 2017.



Table 3-1. Total Recordable Case Rate, (TRC)

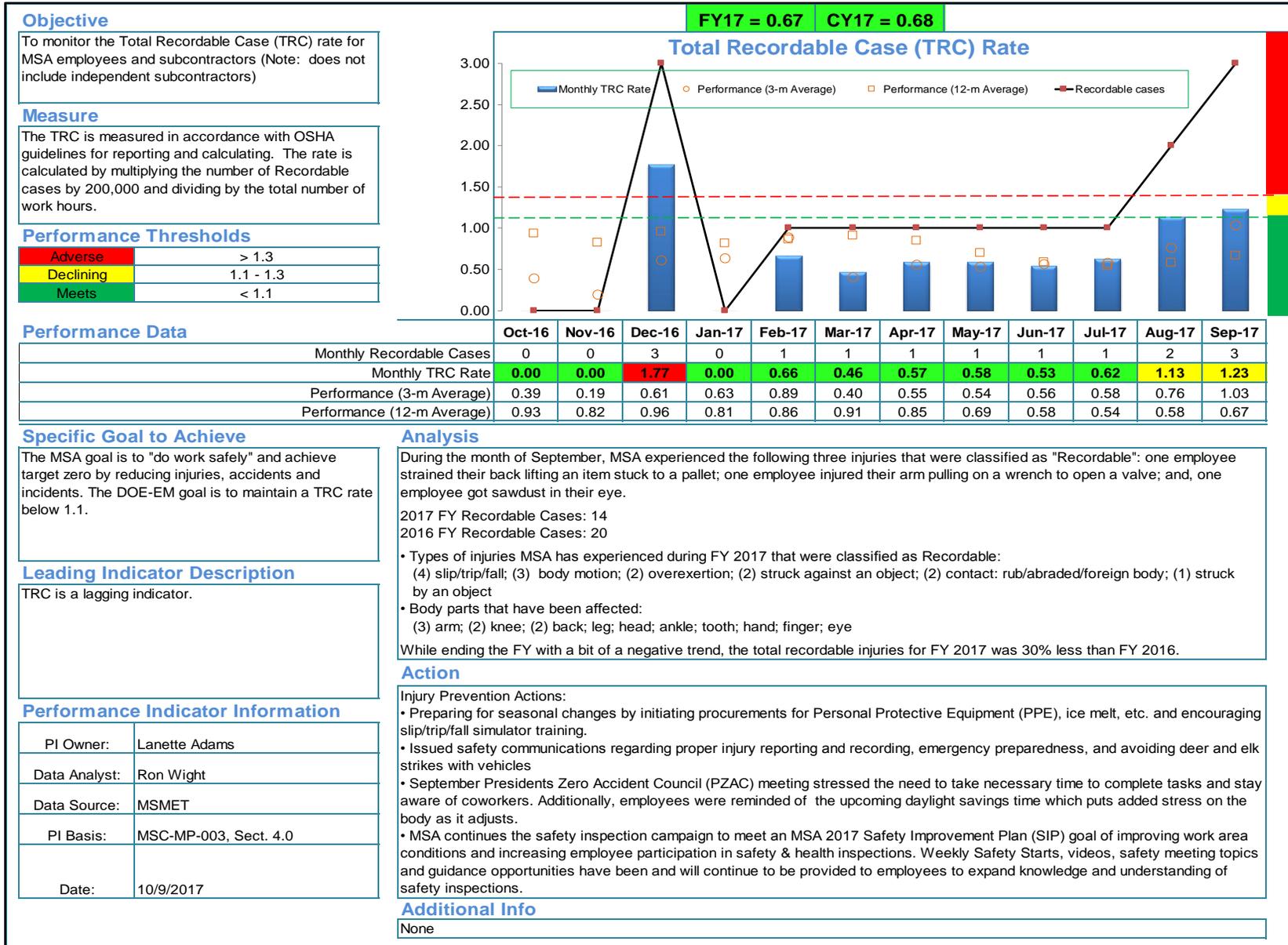


Table 3-2. Days Away, Restricted, Transferred, (DART)

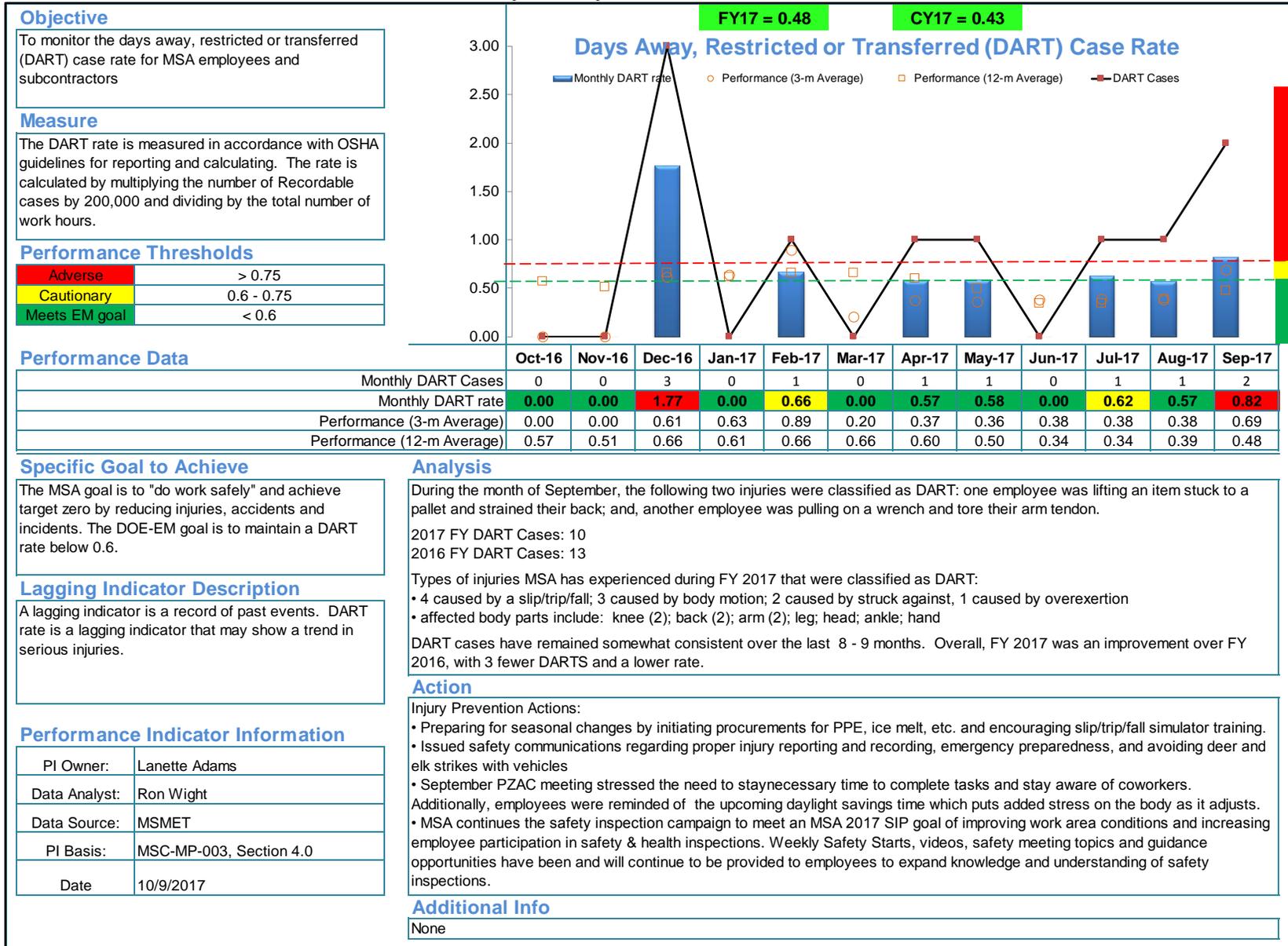




Table 3-3. First-Aid Case Rate

**Objective**

To monitor the number of First Aid cases and rate as a leading indicator to DART and TRC rates for MSA and subcontractor employees.

**Measure**

The metric is a count of the number of First Aid cases per month, and the rate of cases. The rate is calculated by multiplying the number of First Aid cases by 200,000 and dividing by the total number of work hours for a given period.

**Performance Thresholds**

Adverse	n/a
Declining	n/a
Meets	n/a

**Performance Data**

	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17
First Aid Cases	8	8	9	6	11	7	8	9	14	8	11	11
Monthly First Aid Rate	5.45	4.54	5.30	4.66	7.27	3.25	4.60	5.25	7.45	4.97	6.22	4.51
Performance (3 month Average)	4.32	4.18	5.07	4.84	5.78	4.84	4.81	4.28	5.81	5.96	6.28	5.16
Performance (12 month Average)	5.22	5.48	5.45	5.64	5.89	5.65	5.34	5.20	5.26	4.99	5.09	5.23

**Specific Goal to Achieve**

The goal is to "do work safely" and achieve target zero by reducing injuries, accidents and incidents while encouraging reporting of all minor injuries.

**Leading Indicator Description**

Non-reportable precursors are a leading indicator to reportable events. An increase in the number of First Aid cases could indicate a potential increase of more significant events.

**Performance Indicator Information**

PI Owner:	Lanette Adams
Data Analyst:	Ron Wight
Data Source:	MSMET
PI Basis:	MSC-MP-003 Sect. 4.0
Date	10/9/2017

FY17 = 5.23      CY17 = 5.28

**First Aid**

**Analysis**

September concluded with eleven First Aid injury cases. The injuries were caused by the following incidents: one contact - foreign object; two slip/trip/fall; two struck against an object; three awkward body motion; one overexertion; one struck by an object; and one cause was unknown.

FYTD 2017 First Aid Cases: 110

Primary types of First Aid injuries and their affected body parts that occurred during FY 2017:

- 23% by body motion, 20% by a slip/trip/fall, 12% by overexertion, 11% from being struck against, 8% from being struck by, 8% from contact with, 7% Insect bite
- 39% arm/hand injuries; 33% leg/foot injuries; 13% head/neck injuries; and 12% back injuries

FY 2016 First Aid Cased: 104 with a FY year-end case rate of 5.40

Total First Aids increased slightly in FY 2017. This is not unanticipated as MSA's increased focused on reporting all injuries continued in FY 2017.

**Actions**

Injury Prevention Actions:

- Preparing for seasonal changes by initiating procurements for PPE, ice melt, etc. and encouraging slip/trip/fall simulator training.
- Issued safety communications regarding proper injury reporting and recording, emergency preparedness, and avoiding deer and elk strikes with vehicles.
- MSA continues the safety inspection campaign to meet an MSA 2017 SIP goal of improving work area conditions and increasing employee participation in safety & health inspections. Weekly Safety Starts, videos, safety meeting topics and guidance opportunities have been and will continue to be provided to employees to expand knowledge and understanding of safety inspections.



4.0 FORMAT 1, DD FORM 2734/1, WORK BREAKDOWN STRUCTURE

Table 4-1. Format 1, DD Form 2734/1, Work Breakdown Structure

CONTRACT PERFORMANCE REPORT										DOLLARS IN Thousands			FORM APPROVED OMB No. 0704-0188	
FORMAT 1 - WORK BREAKDOWN STRUCTURE														
1. Contractor		2. Contract			3. Program			4. Report Period						
a. Name Mission Support Alliance		a. Name Mission Support Contract			a. Name Mission-Support Contract			a. From (2017/8/21)						
b. Location (Address and Zip Code) Richland, WA 99352		b. Number RL14728			b. Phase Operations			b. To (2017/9/30)						
c. TYPE CPAF		d. Share Ratio			c. EVMS ACCEPTANCE No X Yes									
5. CONTRACT DATA														
a. QUANTITY	b. NEGOTIATED COST	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK		d. TARGET PROFIT/FEE	e. TARGET PRICE	f. ESTIMATED PRICE	g. CONTRACT CEILING	H. ESTIMATED CONTRACT CEILING		I. DATE OF OTB/OTS				
N/A	\$3,460,607	\$0		\$210,360	\$3,670,967	\$3,817,143	N/A	N/A		N/A				
6. ESTIMATED COST AT COMPLETION						7. AUTHORIZED CONTRACTOR REPRESENTATIVE								
				CONTRACT BUDGET BASE (2)	VARIANCE (3)	a. NAME (Last, First, Middle Initial) <i>W. C. Moore, Robert Johnson, William K</i>			b. TITLE MSC Project Manager					
a. BEST CASE				\$3,460,607		c. SIGNATURE <i>[Signature]</i>			d. DATE SIGNED <i>10/26/17</i>					
b. WORST CASE				\$3,787,123										
c. MOST LIKELY				\$3,606,783	3,460,607	(146,177)								
8. PERFORMANCE DATA														
Item (1)	Current Period					Cumulative to Date					At Completion			
	Budgeted Cost		Actual Cost Work Performed (4)	Variance		Budgeted Cost		Actual Cost Work Performed (9)	Variance		Budgeted (12)	Estimated (13)	Variance (14)	
	Work Scheduled (2)	Work Performed (3)		Schedule (5)	Cost (6)	Work Scheduled (7)	Work Performed (8)		Schedule (10)	Cost (11)				
a. WORK BREAKDOWN STRUCTURE ELEMENT														
3001.01.01 - Safeguards and Security	5,815	5,815	8,090	0	(2,275)	465,438	465,438	478,367	0	(12,929)	552,152	565,081	(12,929)	
3001.01.02 - Fire and Emergency Response	1,995	1,995	4,183	0	(2,187)	161,388	161,388	191,990	(0)	(30,603)	191,124	221,727	(30,603)	
3001.01.03 - Emergency Management	631	631	562	0	69	44,156	44,156	36,666	0	7,490	53,553	46,064	7,490	
3001.01.04 - HAMMER	330	330	960	0	(630)	47,711	47,711	59,377	(0)	(11,666)	52,378	64,044	(11,666)	
3001.01.05 - Emergency Services Management	309	309	375	0	(66)	11,384	11,384	12,234	(0)	(850)	13,967	15,145	(1,178)	
3001.02.01 - Site-Wide Safety Standards	28	28	149	0	(121)	5,099	5,099	6,972	(0)	(1,873)	5,681	7,554	(1,873)	
3001.02.02 - Environmental Integration	751	751	817	0	(66)	51,120	51,120	47,291	0	3,829	57,941	54,112	3,829	
3001.02.03 - Public Safety & Resource Protection	1,139	1,139	1,252	0	(113)	61,591	61,591	54,263	0	7,328	78,793	71,465	7,328	
3001.02.04 - Radiological Site Services	11	11	58	0	(47)	3,847	3,847	4,965	(0)	(1,118)	3,847	4,965	(1,118)	
3001.02.05 - WSCF Analytical Services	105	105	0	0	105	55,624	55,624	50,457	(0)	5,167	57,139	51,972	5,167	
3001.03.01 - IM Project Planning & Controls	264	264	233	0	32	34,113	34,113	29,720	0	4,393	38,037	33,644	4,393	
3001.03.02 - Information Systems	1,552	1,552	2,856	0	(1,304)	106,469	106,469	99,472	(0)	6,997	128,412	121,416	6,997	
3001.03.03 - Infrastructure / Cyber Security	345	345	697	0	(352)	29,505	29,505	32,539	(0)	(3,033)	33,941	36,974	(3,033)	
3001.03.04 - Content & Records Management	828	828	1,349	0	(520)	63,247	63,247	57,021	0	6,225	75,463	69,237	6,225	
3001.03.05 - IR/CM Management	124	124	146	0	(22)	4,868	4,868	10,648	0	(5,780)	6,713	12,492	(5,780)	
3001.03.06 - Information Support Services	229	229	217	0	11	14,931	14,931	11,422	0	3,509	18,239	14,730	3,509	
3001.04.01 - Roads and Grounds Services	337	337	914	0	(576)	24,296	24,296	24,158	0	137	29,320	29,182	137	
3001.04.02 - Biological Services	389	389	801	0	(412)	28,796	28,796	30,104	0	(1,309)	34,591	35,899	(1,309)	
3001.04.03 - Electrical Services	722	722	1,986	0	(1,264)	58,547	58,547	90,060	0	(31,513)	69,061	100,574	(31,513)	
3001.04.04 - Water/Sewer Services	839	839	3,383	0	(2,544)	54,457	54,457	97,115	(0)	(42,658)	66,351	109,009	(42,658)	
3001.04.05 - Facility Services	0	0	0	0	0	7,909	7,909	7,900	0	9	7,909	7,900	9	
3001.04.06 - Transportation	0	0	57	0	(57)	7,974	7,974	10,070	(0)	(2,096)	7,974	10,070	(2,096)	



Table 4-1, cont. Format 1, DD Form 2734/1, Work Breakdown Structure

CONTRACT PERFORMANCE REPORT FORMAT 1 - WORK BREAKDOWN STRUCTURE												DOLLARS IN Thousands			FORM APPROVED OMB No. 0704-0188	
1. Contractor		2. Contract				3. Program				4. Report Period						
a. Name		a. Name				a. Name				a. From (2017/8/21)						
Mission Support Alliance		Mission Support Contract				Mission Support Contract										
b. Location (Address and Zip Code)		b. Number		b. Phase				b. To (2017/9/30)								
Richland, WA 99352		RL14728		Operations												
c. TYPE		d. Share Ratio		c. EVMS ACCEPTANCE												
CPAF				No X Yes												
Item (1)	Current Period					Cumulative to Date					At Completion					
	Budgeted Cost		Actual Cost Work Performed (4)	Variance		Budgeted Cost		Actual Cost Work Performed (9)	Variance		Budgeted (12)	Estimated (13)	Variance (14)			
	Work Scheduled (2)	Work Performed (3)		Schedule (5)	Cost (6)	Work Scheduled (7)	Work Performed (8)		Schedule (10)	Cost (11)						
a. WORK BREAKDOWN STRUCTURE ELEMENT (Cont'd)																
3001.04.07 - Fleet Services	69	69	(0)	0	69	7,835	7,835	7,322	0	513	8,860	8,347	513			
3001.04.08 - Crane and Rigging	0	0	0	0	0	2,187	2,187	2,187	(0)	(0)	2,187	2,187	(0)			
3001.04.09 - Railroad Services	0	0	15	0	(15)	370	370	501	(0)	(131)	370	501	(131)			
3001.04.10 - Technical Services	359	359	1,194	0	(835)	35,629	35,629	39,392	0	(3,763)	40,924	44,687	(3,763)			
3001.04.11 - Energy Management	346	346	194	0	152	16,866	16,866	9,015	(0)	7,851	22,273	14,422	7,851			
3001.04.12 - Hanford Historic Buildings Preservation	(46)	(46)	329	0	(375)	19,887	19,887	20,553	0	(666)	22,153	22,819	(666)			
3001.04.13 - Work Management	119	119	408	0	(289)	10,167	10,167	14,362	(0)	(4,196)	11,932	16,128	(4,196)			
3001.04.14 - Land and Facilities Management	876	876	568	0	309	42,951	42,951	35,745	(0)	7,206	53,947	46,741	7,206			
3001.04.15 - Mail & Courier	143	143	52	0	91	8,721	8,721	5,889	(0)	2,832	10,840	8,008	2,832			
3001.04.16 - Property Systems/Acquisitons	653	653	835	0	(182)	46,096	46,096	46,825	0	(729)	55,823	56,552	(729)			
3001.04.17 - General Supplies Inventory	16	16	55	0	(40)	2,319	2,319	1,757	0	562	2,548	1,986	562			
3001.04.18 - Maintenance Management Program Implem	235	235	198	0	37	9,240	9,240	8,924	0	316	12,710	12,394	316			
3001.06.01 - Business Operations	408	408	779	0	(371)	39,787	39,787	7,656	0	32,131	45,840	13,709	32,131			
3001.06.02 - Human Resources	290	290	295	0	(5)	20,069	20,069	19,099	(0)	971	24,397	23,427	971			
3001.06.03 - Safety, Health & Quality	1,403	1,403	2,283	0	(880)	121,964	121,964	144,450	(0)	(22,486)	142,940	165,425	(22,486)			
3001.06.04 - Miscellaneous Support	859	859	758	0	101	57,461	57,461	43,253	(0)	14,208	70,285	56,077	14,208			
3001.06.05 - Presidents Office (G&A nonPMB)	0	0	0	0	0	16	16	16	0	0	16	16	0			
3001.06.06 - Strategy	0	0	0	0	0	959	959	2,529	0	(1,570)	959	2,529	(1,570)			
3001.07.01 - Portfolio Management	679	679	566	0	113	59,404	59,404	51,562	(0)	7,842	69,710	61,869	7,842			
3001.08.01 - Water System	982	519	331	(464)	188	26,439	27,125	14,549	686	12,576	35,364	22,703	12,661			
3001.08.02 - Sewer System	120	73	104	(47)	(31)	7,415	7,303	10,386	(112)	(3,083)	17,048	18,742	(1,695)			
3001.08.03 - Electrical System	145	43	(126)	(102)	169	15,930	15,883	16,662	(47)	(778)	16,932	17,494	(562)			
3001.08.04 - Roads and Grounds	11	0	(29)	(11)	29	9,134	9,137	8,533	3	604	9,137	8,533	604			
3001.08.05 - Facility System	3	3	2	0	1	5,614	5,614	5,654	(0)	(40)	9,238	9,279	(41)			
3001.08.06 - Reliability Projects Studies & Estimates	546	546	653	0	(108)	8,507	8,507	10,609	(0)	(2,102)	8,507	11,038	(2,532)			
3001.08.07 - Reliability Project Spare Parts Inventory	0	0	(8)	0	8	86	86	2,692	0	(2,606)	86	2,692	(2,606)			
3001.08.08 - Network & Telecommunications System	14	41	85	27	(43)	11,219	11,216	16,582	(3)	(5,366)	14,164	19,527	(5,363)			
3001.08.09 - Capital Equipment Not Related to Constructi	0	2,102	1,988	2,102	114	11,154	11,154	10,835	(0)	319	11,154	10,835	319			
3001.08.10 - WSCF - Projects	0	0	0	0	0	979	979	810	0	169	979	810	169			
3001.08.11 - Support of Infrastructure Interface to ORP	23	18	8	(5)	10	991	985	735	(6)	250	1,240	947	293			
3001.08.12 - Reliability Projects Out Year Planning	0	0	0	0	0	0	0	0	0	0	68,409	68,409	0			
3001.90.04 - MSA Transition	0	0	0	0	0	5,868	5,868	5,868	0	0	5,868	5,868	0			
3001.B1.06 - Projects	0	0	0	0	0	(0)	(0)	0	(0)	(0)	(0)	0	(0)			
b. COST OF MONEY																
c. GENERAL AND ADMINISTRATIVE																
d. UNDISTRIBUTED BUDGET																
e. SUBTOTAL (Performance Measurement Baseline)																
	24,999	26,500	40,623	1,500	(14,123)	1,947,734	1,948,255	2,007,763	522	(59,507)	2,379,425	2,437,957	(58,532)			



Table 4-1, cont. Format 1, DD Form 2734/1, Work Breakdown Structure

CONTRACT PERFORMANCE REPORT													DOLLARS IN Thousands			FORM APPROVED OMB No. 0704-0188		
FORMAT 1 - WORK BREAKDOWN STRUCTURE																		
1. Contractor		2. Contract				3. Program				4. Report Period								
a. Name Mission Support Alliance		a. Name Mission Support Contract				a. Name Mission Support Contract				a. From (2017/8/21)								
b. Location (Address and Zip Code) Richland, WA 99352		b. Number RL14728				b. Phase Operations				b. To (2017/9/30)								
c. TYPE CPAF		d. Share Ratio				c. EVMS ACCEPTANCE No X Yes												
Item (1)	Current Period					Cumulative to Date					At Completion							
	Budgeted Cost		Actual Cost	Variance		Budgeted Cost		Actual Cost	Variance		Budgeted (12)	Estimated (13)	Variance (14)					
	Work Scheduled (2)	Work Performed (3)	Work Performed (4)	Schedule (5)	Cost (6)	Work Scheduled (7)	Work Performed (8)	Work Performed (9)	Schedule (10)	Cost (11)								
a2. WORK BREAKDOWN STRUCTURE ELEMENT																		
3001.01.04 - HAMMER	1,059	1,059	2,017	0	(958)	109,696	109,696	114,624	0	(4,928)	122,794	127,723	(4,928)					
3001.02.04 - Radiological Site Services	1,451	1,451	1,392	0	60	66,652	66,652	47,495	0	19,157	87,635	68,478	19,157					
3001.02.05 - WSCF Analytical Services	1,368	1,368	0	0	1,368	93,236	93,236	53,176	0	40,060	113,653	73,593	40,060					
3001.03.02 - Information Systems	272	272	319	0	(47)	4,284	4,284	3,987	0	297	8,247	7,950	297					
3001.03.04 - Content & Records Management	90	90	95	0	(5)	1,416	1,416	1,300	0	116	2,759	2,643	116					
3001.03.06 - Information Support Services	0	0	0	0	0	4,726	4,726	4,043	0	683	4,726	4,043	683					
3001.03.07 - Information Technology Services	3,328	3,328	3,164	0	165	40,189	40,189	41,551	0	(1,362)	88,701	90,064	(1,362)					
3001.04.05 - Facility Services	780	780	1,136	0	(356)	54,036	54,036	62,237	0	(8,201)	65,316	73,517	(8,201)					
3001.04.06 - Transportation	211	211	1,613	0	(1,402)	21,646	21,646	40,394	0	(18,748)	24,733	43,481	(18,748)					
3001.04.07 - Fleet Services	877	877	2,075	0	(1,198)	90,879	90,879	114,288	0	(23,409)	103,884	127,293	(23,409)					
3001.04.08 - Crane and Rigging	1,095	1,095	1,722	0	(627)	91,412	91,412	98,628	0	(7,216)	107,654	114,870	(7,216)					
3001.04.10 - Technical Services	7	7	254	0	(247)	57	57	3,503	0	(3,446)	149	3,595	(3,446)					
3001.04.13 - Work Management	0	0	75	0	(75)	595	595	3,229	0	(2,635)	595	3,229	(2,635)					
3001.04.14 - Land and Facilities Management	814	814	918	0	(105)	53,986	53,986	54,178	0	(192)	65,955	66,146	(192)					
3001.04.15 - Mail & Courier	24	24	22	0	2	1,270	1,270	1,275	0	(5)	1,624	1,630	(5)					
3001.06.01 - Business Operations	1,036	1,036	1,466	0	(431)	87,146	87,146	92,133	0	(4,987)	102,429	107,417	(4,987)					
3001.06.02 - Human Resources	196	196	451	0	(254)	17,559	17,559	24,016	0	(6,458)	20,434	26,892	(6,458)					
3001.06.03 - Safety, Health & Quality	216	216	266	0	(50)	14,304	14,304	11,643	0	2,661	17,521	14,860	2,661					
3001.06.04 - Miscellaneous Support	99	99	445	0	(347)	9,930	9,930	13,378	0	(3,448)	11,399	14,847	(3,448)					
3001.06.05 - Presidents Office (G&A nonPMB)	408	408	340	0	68	26,120	26,120	21,443	0	4,677	32,127	27,451	4,677					
3001.06.06 - Strategy	30	30	30	0	(0)	3,055	3,055	2,597	0	458	3,502	3,044	458					
3001.A1.01 - Transfer - CHPRC	7,908	7,908	8,218	0	(310)	641,359	641,359	569,629	0	71,730	755,037	683,307	71,730					
3001.A1.02 - Transfer - WRPS	1,594	1,594	5,998	0	(4,404)	130,312	130,312	226,527	0	(96,215)	153,032	249,246	(96,215)					
3001.A1.03 - Transfers - FH Closeout	0	0	0	0	0	179	179	228	0	(50)	184	234	(50)					
3001.A1.04 - Transfers - CHG Closeout	0	0	0	0	0	12	12	13	0	(0)	12	13	(0)					
3001.A2.01 - Non Transfer - BNI	0	0	23	0	(23)	1,188	1,188	2,978	0	(1,790)	1,188	2,978	(1,790)					
3001.A2.02 - Non Transfer - AMH	16	16	0	0	16	1,687	1,687	954	0	733	1,924	1,191	733					
3001.A2.03 - Non Transfer - ATL	22	22	0	0	22	1,230	1,230	702	0	528	1,541	1,013	528					
3001.A2.04 - Non-Transfer - WCH	420	420	23	0	398	42,956	42,956	41,653	0	1,303	48,813	47,511	1,303					
3001.A2.05 - Non-Transfers - HPM	0	0	46	0	(46)	3	3	2,142	0	(2,138)	3	2,142	(2,138)					
3001.A2.06 - Non-Transfers - BNI Corp	0	0	0	0	0	0	0	1	0	(1)	0	1	(1)					
3001.A2.07 - Non-Transfers-WAI	0	0	10	0	(10)	0	0	567	0	(567)	0	567	(567)					
3001.A4.01 - Request for Services	462	462	1,312	0	(850)	71,889	71,889	101,579	0	(29,689)	78,693	108,382	(29,689)					
3001.A4.02 - HAMMER RFSS	4	4	458	0	(454)	7,091	7,091	30,404	0	(23,313)	7,149	30,462	(23,313)					
3001.A4.03 - National Guard RFSS	0	0	0	0	0	1,603	1,603	1,550	0	53	1,605	1,552	53					
3001.A4.04 - PNNL RFSS	24	24	73	0	(49)	7,008	7,008	10,451	0	(3,442)	7,322	10,764	(3,442)					
3001.A5.01 - RL PD	74	74	70	0	4	3,636	3,636	5,780	0	(2,144)	4,734	6,878	(2,144)					
3001.A5.02 - ORP PD	0	0	96	0	(96)	37	37	7,159	0	(7,122)	37	7,159	(7,122)					



Table 4-1, cont. Format 1, DD Form 2734/1, Work Breakdown Structure

CONTRACT PERFORMANCE REPORT													DOLLARS IN Thousands		FORM APPROVED OMB No. 0704-0188	
FORMAT 1 - WORK BREAKDOWN STRUCTURE																
1. Contractor		2. Contract			3. Program			4. Report Period								
a. Name		a. Name			a. Name			a. From (2017/8/21)								
b. Location (Address and Zip Code)		b. Number			b. Phase			b. To (2017/9/30)								
		c. TYPE			c. EVMS ACCEPTANCE											
Item (1)	Current Period						Cumulative to Date				At Completion					
	Budgeted Cost		Actual Cost	Variance		Budgeted Cost		Actual Cost	Variance		Budgeted (12)	Estimated (13)	Variance (14)			
	Work Scheduled (2)	Work Performed (3)	Work Performed (4)	Schedule (5)	Cost (6)	Work Scheduled (7)	Work Performed (8)	Work Performed (9)	Schedule (10)	Cost (11)						
3001.A5.03 - RL Project Funded	66	66	356	0	(290)	1,143	1,143	7,217	0	(6,074)	2,081	8,156	(6,074)			
3001.A5.04 - ORP Project Funded	0	0	144	0	(144)	0	0	3,023	0	(3,023)	0	3,023	(3,023)			
3001.A6.01 - Portfolio PMTOs	43	43	44	0	(1)	304	304	237	0	67	304	237	67			
3001.A7.01 - G&A Liquidations	(2,008)	(2,008)	(2,739)	0	730	(159,267)	(159,267)	(169,525)	0	10,258	(189,028)	(199,286)	10,258			
3001.A7.02 - DLA Liquidations	(1,369)	(1,369)	(3,013)	0	1,643	(81,550)	(81,550)	(107,239)	0	25,689	(101,056)	(126,745)	25,689			
3001.A7.03 - Variable Pools Revenue	(10,024)	(10,024)	(11,394)	0	1,369	(552,146)	(552,146)	(531,744)	0	(20,402)	(696,863)	(676,461)	(20,402)			
3001.B1.01 - UBS Assessments for Other Providers	3	3	0	0	3	136	136	0	0	136	184	0	184			
3001.B1.02 - UBS Other MSC - HAMMER M&O	15	15	0	0	15	624	624	0	0	624	843	0	843			
3001.B1.03 - Assessment for Other Provided Services	152	152	0	0	152	6,382	6,382	0	0	6,382	8,612	0	8,612			
3001.B1.04 - Assessment for PRC Services to MSC	84	84	0	0	84	3,738	3,738	0	0	3,738	4,977	0	4,977			
3001.B1.07 - Request for Services	1	1	0	0	1	252	252	0	0	252	274	0	274			
a2. WORK BREAKDOWN STRUCTURE ELEMENT																
b2. COST OF MONEY																
c2. GENERAL AND ADMINISTRATIVE																
d2. UNDISTRIBUTED BUDGET																
e2. SUBTOTAL (Non - Performance Measurement)	10,846	10,846	17,526	0	(6,681)	921,998	921,998	1,013,402	0	(91,404)	1,077,440	1,165,085	(87,645)			
f. MANAGEMENT RESERVE																
g. TOTAL	35,845	37,346	58,149	1,500	(20,804)	2,869,732	2,870,254	3,021,165	522	(150,911)	3,460,607	3,606,783	(146,177)			
9. RECONCILIATION TO CONTRACT BUDGET BASE																
a. VARIANCE ADJUSTMENT																
b. TOTAL CONTRACT VARIANCE																



5.0 FORMAT 3, DD FORM 2734/3, BASELINE

Table 5-1. Format 3, DD Form 2734/3, Baseline

CONTRACT PERFORMANCE REPORT															FORM APPROVED			
FORMAT 3 - BASELINE															OMB No. 0704-0188			
DOLLARS IN Thousands																		
<b>1. Contractor</b>		<b>2. Contract</b>			<b>3. Program</b>				<b>4. Report Period</b>									
a. Name		a. Name			a. Name				a. From (2017/8/21)									
Mission Support Alliance		Mission Support Contract			Mission Support Contract													
<b>b. Location (Address and Zip Code)</b>		<b>b. Number</b>			<b>b. Phase</b>				<b>b. To (2017/9/30)</b>									
Richland, WA 99352		RL14728			Operations													
		c. TYPE	d. Share Ratio		c. EVMS ACCEPTANCE													
		CPAF			No X Yes													
<b>5. CONTRACT DATA</b>																		
<b>a. ORIGINAL NEGOTIATED COST</b>		<b>b. NEGOTIATED CONTRACT CHANGES</b>		<b>c. CURRENT NEGOTIATED COST (a+b)</b>		<b>d. ESTIMATED COST OF UNAUTHORIZED UNPRICED WORK</b>			<b>e. CONTRACT BUDGET BASE (C+D)</b>		<b>f. TOTAL ALLOCATED BUDGET</b>			<b>g. DIFFERENCE (E - F)</b>				
\$2,854,966		\$605,641		\$3,460,607		\$0			\$3,460,607		\$3,460,606			\$0				
<b>h. CONTRACT START DATE</b>		<b>i. CONTRACT DEFINITIZATION DATE</b>			<b>j. PLANNED COMPLETION DATE</b>				<b>k. CONTRACT COMPLETION DATE</b>		<b>l. ESTIMATED COMPLETION DATE</b>							
2009/05/24		2009/05/24			2019/05/25				2019/05/25		2019/05/25							
<b>6. PERFORMANCE DATA</b>																		
ITEM  (1)	BCWS CUMULATIVE TO DATE  (2)	BCWS FOR REPORT PERIOD  (3)	BUDGETED COST FOR WORK SCHEDULED (BCWS) (Non-Cumulative)												UNDISTRIBUTED BUDGET  (15)	TOTAL BUDGET  (16)		
			Six Month Forecast By Month															
			Oct FY18 (4)	Nov FY18 (5)	Dec FY18 (6)	Jan FY18 (7)	Feb FY18 (8)	Mar FY18 (9)	Apr FY18 (10)	May FY18 (11)	Jun FY18 (12)	Remaining FY18 (13)	FY19 (14)					
a. PERFORMANCE MEASUREMENT BASELINE (Beginning of Period)	1,922,734	25,248	16,599	18,411	19,451	13,169	18,280	20,890	17,062	17,081	20,341	133,612	135,872	0	2,378,749			
b. BASELINE CHANGES AUTHORIZED DURING REPORT PERIOD	24,999	(25,248)	(3,245)	(1,088)	1,628	1,325	1,466	901	828	767	521	(75,386)	73,207	0	676			
a. PERFORMANCE MEASUREMENT BASELINE (End of Period)	1,947,734		13,354	17,323	21,079	14,493	19,746	21,791	17,890	17,848	20,862	58,226	209,079	0	2,379,425			



Table 5-1, cont. Format 3, DD Form 2734/3, Baseline

DOLLARS IN Thousands													FORM APPROVED OMB No. 0704-0188		
1. Contractor		2. Contract		3. Program			4. Report Period								
a. Name Mission Support Alliance		a. Name Mission Support Contract		a. Name Mission Support Contract			a. From (2017/8/21)								
b. Location (Address and Zip Code) Richland, WA 99352		b. Number RL14728		b. Phase Operations			b. To (2017/9/30)								
c. TYPE CPAF		d. Share Ratio		c. EVMS ACCEPTANCE No X Yes											
6. PERFORMANCE DATA															
ITEM	BCWS CUMULATIVE TO DATE (2)	BCWS FOR REPORT PERIOD (3)	BUDGETED COST FOR WORK SCHEDULED (BCWS) (Non-Cumulative)											UNDISTRIBUTED BUDGET (15)	TOTAL BUDGET (16)
			Six Month Forecast By Month												
			Oct FY18 (4)	Nov FY18 (5)	Dec FY18 (6)	Jan FY18 (7)	Feb FY18 (8)	Mar FY18 (9)	Apr FY18 (10)	May FY18 (11)	Jun FY18 (12)	Remaining FY18 (13)	FY19 (14)		
a2. NON - PERFORMANCE MEASUREMENT BASELINE (Beginning of Period)	911,153	10,846	6,486	7,466	8,287	5,472	7,708	9,029	7,419	7,474	8,926	24,567	62,608	0	1,077,440
b2. BASELINE CHANGES AUTHORIZED DURING REPORT PERIOD	10,846	(10,846)	0	0	0	0	0	0	0	0	0	0	0	0	0
a2. NON - PERFORMANCE MEASUREMENT BASELINE (End of Period)	921,998		6,486	7,466	8,287	5,472	7,708	9,029	7,419	7,474	8,926	24,567	62,608	0	1,077,440
7. MANAGEMENT RESERVE															3,741
8. TOTAL	2,869,732	0	19,840	24,789	29,366	19,965	27,454	30,820	25,308	25,322	29,788	82,793	271,687	0	3,460,606



6.0 FORMAT 5, DD FORM 2734/5, EXPLANATIONS AND PROBLEM ANALYSIS

Table 6-1, Format 5, DD Form 2734/5, Explanations and Problem Analysis

1. Contractor	2. Contract		3. Program	4. Report Period
a. Name Mission Support Alliance	a. Name Mission Support Contract		a. Name Mission Support Contract	a. From (2017/8/21)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2017/9/30)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

Explanation of Variance /Description of Problem:

**Current Month Cost Variance (CV):**

**3001.01.01 Safeguards and Security** – Unfavorable CM CV is due to implementation of the Graded Security Protection Policy that significantly increased manpower requirements and the bid assumption that the Spent Nuclear Material (SNM) would be shipped off the Hanford site by year 3. This policy was subsequent to the MSA baseline proposal and implementation.

**3001.01.02 Fire and Emergency** – Unfavorable CM CV is primarily due to the approved Integrated Investment Portfolio (IIP) funded scope being divergent from the contract baseline because of a budgeting omission for platoon shift hours in the Hanford Fire Department as well as the bid assumption that multiple fire stations would have been closed.

**3001.01.04 HAMMER** – Unfavorable CM CV is due to the assumption that less Environmental Management (EM) funding would be required because HAMMER could self-fund itself by performing enough services for non-Hanford entities. This assumption that was included in the proposal has not occurred. As a result, the EM budget will remain lower than the EM funds authorized. This divergent situation has remained and continued to increase the Fiscal Year (FY) 2017 CV. Services delivered at HAMMER have not been adversely affected because the services are executed consistent with the approved Integrated Investment Portfolio (IIP) scope.

**3001.03.02 Information Systems** – Unfavorable CM CV is due to the payment of year-end software license maintenance agreements.

**3001.03.03 Infrastructure/Cyber Security** – Unfavorable CM CV is due to the payment of year-end software license maintenance agreements.

**3001.03.04 Content & Records Management** – Unfavorable CM CV is due to the payment of software license maintenance agreements at fiscal year-end.

**3001.04.01 Roads and Grounds Services** – Unfavorable CM CV is due to severe weather events realized in the first and second quarter and an increase of deicer materials required to backfill and support upcoming snow removal on roads, parking lots, and walkways.

**3001.04.02 Biological Services** – Unfavorable CM CV is due to increased labor usage hours required to ensure the control of noxious



Table 6-1, cont. Format 5, DD Form 2734/5, Explanations and Problem Analysis

1. Contractor	2. Contract		3. Program	4. Report Period
a. Name Mission Support Alliance	a. Name Mission Support Contract		a. Name Mission Support Contract	a. From (2017/8/21)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2017/9/30)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

weeds and vegetation growth. Purchase of a compactor truck was also required to maintain large windblown tumbleweed accumulations near facilities, roadways, fence lines, waste sites, radiological areas and tank farms.

**3001.04.03 Electrical Services** – Unfavorable CM CV is due to staffing levels that are currently higher than the baseline due to additional maintenance activities required to maintain the electrical distribution system. The system has degraded across the site due to age. Electrical Services is part of the Enhanced Maintenance Program, and has compliance issues that have increased the cost to the program.

**3001.04.04 Water/Sewer Services** – Unfavorable CM CV is due to staffing levels that are currently higher than the baseline due to additional maintenance activities required to maintain the water and sewer distribution system. The system has degraded across the site due to age. Water & Sewer Utilities (W&SU) is part of the Enhanced Maintenance Program, and has compliance issues that have increased the cost to the program.

**3001.04.10 Technical Services** – Unfavorable CM CV is due to the difference between the contract baseline and approved funding in the IIP. The DOE-RL provided approval of the baseline data for reporting progress and also provided an approved funded priority list of items for MSA work scope. The divergent funding and approved priority work scope being different than the baseline scope is the major reason for this variance.

**3001.04.12 Hanford Historic Buildings Preservation** – Unfavorable CM CV is due to B-Reactor activities being divergent from the baseline. MSA currently provides more tours than had been planned in the original baseline.

**3001.04.13 Work Management** – Unfavorable CM CV is due to increased occupancy, training, and other personnel related charges for new work control planners hired to support MSA Utilities. The FY18 invoice for Maximo/Phoenix License was processed in FY17.

**3001.04.14 Land and Facilities Management** – Favorable CM CV is primarily due to approved funding and IIP scope for condition assessment surveys being divergent from the baseline. No mitigating actions are required at this time.

**3001.06.01 Business Operations** – Unfavorable CM CV is due to Program Control costs that were beyond the original contract bid. Completion of the 2430 Stevens relocation project was a partial cause of this CV.

**3001.06.03 Safety, Health & Quality** – Unfavorable CM CV is primarily due to the IIP scope and approved funding increases in Radiation Protection and Worker Safety & Health. Since fiscal year IIP/funding authorizations adjust for these differences, no mitigations are planned at this time.



Table 6-1, cont. Format 5, DD Form 2734/5, Explanations and Problem Analysis

1. Contractor	2. Contract		3. Program	4. Report Period
a. Name Mission Support Alliance	a. Name Mission Support Contract		a. Name Mission Support Contract	a. From (2017/8/21)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2017/9/30)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

**3001.A1 – 3001.B1 Non-PMB** – Unfavorable CM CV is primarily due to RL approved funding and priority scope being divergent from the baseline for Request for Service (RFS) and Inter-Contractor Work Order (ICWO) activities.

**Impacts – Current Month Cost Variance:**

MSA has operated at authorized FY 2017 funding levels that exceed the contract budget. There are no impacts associated with this CM unfavorable CV.

**Corrective Action – Current Month Cost Variance:** None

**Current Month Schedule Variance:**

**3001.08.01 Water System** – Unfavorable CM SV is due to project L-419 “Line Ren/Reo from 2901U to 200E”. The construction subcontractor has mobilized and performed work more quickly than planned so performance was previously earned.

**3001.08.03 Electrical System** – Unfavorable CM SV is due to task 3 design activities scheduled for the current month were performed in a prior period. Also, task 2, initial testing and treating of wood poles, did not start on the baseline start date. Testing and treating activities will start later than planned but according to the subcontractor schedule, will finish earlier than planned.

**3001.08.09 Capital Equipment Not Related to Construction** – Favorable CM SV is due to equipment procurement EC04, “Replace 110-Ton Trck Crn w/150-Ton Crane”. Procurement was budgeted earlier in the fiscal year but the equipment was not received until September which caused the favorable CM SV.

**Impacts – Current Month Schedule Variance:** Impacts are minimal because each Reliability Project is an independent stand-alone project.

**Corrective Action – Current Month Schedule Variance:** None.

**Cumulative Cost Variance:** Several key areas contributing to the Cumulative-to-Date CV (CTD CV) are as follows:

**Fiscal Year Funding Authorizations:** During October of 2011, MSA completed re-aligning the baseline to the negotiated contract, and by using the approved change control process, implemented the re-aligned baseline data for the start of 2012. RL provided approval of the baseline data for reporting progress, and also provided an approved and funded priority list of items for MSA work scope. The CTD CV is primarily due to RL approved funding and priority list scope being divergent from the baseline for FY 2013, FY 2014, FY 2015, FY 2016 and FY 2017.



Table 6-1, cont. Format 5, DD Form 2734/5, Explanations and Problem Analysis.

1. Contractor	2. Contract		3. Program	4. Report Period
a. Name Mission Support Alliance	a. Name Mission Support Contract		a. Name Mission Support Contract	a. From (2017/8/21)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2017/9/30)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

**Labor and Pension costs:** After the original submittal of the Forward Pricing Rates (FPR), it was determined that MSA had incorrectly factored the cost of the Hanford Site Pension Plan (HSPP) and the Hanford Employee Welfare Trust (HEWT) into the labor rates. This was disclosed to MSA in the Source Selection Evaluations Board’s (SEB) Debrief of the Mission Support Contract (MSC) in May 2009. MSA received contract modifications associated with pension cost and labor adder adjustments for FY 2009 through FY 2016, which increased the contract value. The FY 2016 pension and labor adder proposal was negotiated and incorporated in April 2017. At the request of RL, the labor and pension proposals are submitted annually at fiscal year-end. The FY 2017 variances associated with labor and pension has continued to grow during the fiscal year.

**3001.01.01 Safeguards and Security:** Unfavorable CTD CV is primarily due to differences in the baseline budgeting and FY IIP authorizations. For example, Safeguards and Security included a baseline planning assumption that a Graded Security Policy could be implemented at a reduced cost and the bid assumption that Spent Nuclear Material (SNM) would be shipped off the Hanford site by year 3. Since FY IIP/funding authorizations adjust for these differences, no mitigating actions are in place at this time to reduce the overall cost variance.

**3001.01.02 Fire & Emergency Response:** Unfavorable CTD CV is primarily due to a budgeting omission for platoon shift hours in the Hanford Fire Department as well as the bid assumption that multiple fire stations would have been closed. Since FY IIP/funding authorizations adjust for these differences, no mitigating actions are in place at this time to reduce the overall CV.

**3001.01.03 Emergency Management:** Favorable CTD CV is because work being performed according to the RL-directed Contract Baseline Alignment Guidance (CBAG) provides for MSA/RL agreed scope, and a spending target that is different than the Contract Baseline Budget. No mitigating actions are required at this time.

**3001.01.04 HAMMER:** Unfavorable CTD CV is predominantly due to the assumption that less EM funding would be required because HAMMER could self-fund itself by performing enough services for non-Hanford entities. This assumption has not occurred. As a result of this inaccurate assumption, the EM budget will remain lower than the EM funds authorized. Because of this divergent situation, the CTD CV will continue to increase. Services delivered at HAMMER will not be adversely affected because the services are executed consistent with the approved FY IIP/funding. No other potential contributing performance issues were identified.

**3001.02.03 Public Safety & Resource Protection (PSRP):** Favorable CTD CV is primarily due to the approved funding and IIP scope being



Table 6-1, cont. Format 5, DD Form 2734/5, Explanations and Problem Analysis

1. Contractor	2. Contract		3. Program	4. Report Period
a. Name Mission Support Alliance	a. Name Mission Support Contract		a. Name Mission Support Contract	a. From (2017/8/21)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2017/9/30)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

divergent from the baseline for PSRP in Field Surveillance/Near-Facility Monitoring and Curation Services. No mitigating actions are required at this time.

**3001.02.05 WSCF Analytical Services:** Favorable CTD CV is primarily due to the WSCF work scope discontinuing the Ready-to-Serve laboratory operations in FY2014 and still having budget for Radiological Site Services (RSS) based on RSS consumption during operations. No mitigations are required at this time because this variance will be eliminated with the FY 2013 through FY 2016 Cost Variance proposals.

**3001.03.02 Information Systems:** Favorable CTD CV is due to continued savings from self-performance of Software Engineering Services.

**3001.03.04 Contents & Records Management:** Favorable CTD CV is primarily due to the approved funding and IIP scope being divergent from the baseline, but is also due to the cost savings associated with self-performance of the records scope, and a reduction in system administration/software engineering costs from the self-performance of software engineering services.

**3001.03.05 IR/CM Management:** Unfavorable CTD CV is primarily due to the approved funding and IIP scope being divergent from the baseline, but is also due to the unplanned Information Technology (IT) subcontract transition effort and related software costs.

**3001.04.03/04 Electrical/Water & Sewer Services:** Unfavorable CTD CV is primarily due to the aging life of the infrastructure on the Hanford Site. More staffing and material procurements than were included in the baseline have been authorized through the FY IIP/funding process. These changes have resulted in increased costs for infrastructure repairs, compliance issues, and maintenance activities. In addition, an enhanced maintenance program has been established to better predict future system failures, and predictive maintenance is replacing the preventative maintenance method. Since fiscal year IIP/funding authorizations adjust for these differences, no mitigations are planned at this time.

**3001.04.11 Energy Management:** Favorable CTD CV is primarily due to implementing the energy efficiency guiding principles of Executive Order 13514, high performance sustainability buildings, site-wide sustainability activities, recycling service areas, and approved funding and IIP scope being divergent from the baseline. No mitigating actions are required at this time.

**3001.04.14 Land and Facilities Management –** Favorable CTD CV is primarily due to approved funding and IIP scope for condition assessment surveys being divergent from the baseline. No mitigating actions are required at this time.

**3001.06.01 Business Operations:** Favorable CTD CV is primarily due to credits associated with affiliate fee on IT scope and training on overtime pending final resolution.



Table 6-1, cont. Format 5, DD Form 2734/5, Explanations and Problem Analysis

1. Contractor	2. Contract		3. Program	4. Report Period
a. Name Mission Support Alliance	a. Name Mission Support Contract		a. Name Mission Support Contract	a. From (2017/8/21)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2017/9/30)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

**3001.06.03 Safety, Health & Quality:** Unfavorable CTD CV is primarily due to the IIP scope and approved funding increases in Radiation Protection, Worker Safety & Health, and Beryllium accounts. Since fiscal year IIP/funding authorizations adjust for these differences, no mitigations are planned at this time.

**3001.06.04 Miscellaneous Support:** Favorable CTD CV is primarily due to MSA Engineering approved funding and IIP being divergent from the contract baseline. Through the annual IIP process, the MSA Engineering organization was authorized/funded to perform much less work than planned in the baseline.

**3001.07.01 Portfolio Management:** Favorable CTD CV is primarily due to less Portfolio Planning, Analysis & Performance Services, support required than assumed for integrated planning actions.

**3001.08.01 Water System:** Favorable CTD CV is due to projects L-525, "24in Line Replacement from 2901Y to 200E" & L-840, "24in Line Replacement from 2901Y to 200W" awarding the construction subcontracts for substantially less than initially estimated. The significant construction cost savings is attributable to the contractor's expertise in this type of construction and significantly less difficult site conditions encountered than were assumed when preparing the initial cost estimate. Previously reported projects L-399 "T-Plant Potable & Raw Water Line Rest" and L-311 "200W Raw Water Reservoir Refurbish" also contributed to this favorable variance, and Project L-419 "Line Ren/Reo from 2901U to 200E" was mobilized and work performed more quickly than planned.

**3001.08.08 Network & Telecommunications:** Unfavorable CTD CV is primarily due to approved funding authorizations for the ET51 HLAN Phase 2 Network expansion, L-713 Records Storage Facility, and ET60 Enterprise VoIP Solution Implementation scope that was divergent from the baseline.

**3001.A1 – 3001.B1 Non-PMB:** Unfavorable CTD CV is primarily due to other Hanford contractors and government agencies requesting more usage-based services (i.e., Training, Crane & Rigging, Fleet Services, Occupancy, etc.) than planned in the baseline. Since this work scope is providing services as requested, and is fully authorized through the Inter-Contractor Work Orders/Request for Services process, no mitigations are planned at this time. Note that for the non-PMB, the WBS elements 3001.01.04 - 3001.06.06 represent the Usage-Based Pool, General and Administrative (G&A), and Direct Labor Adder (DLA) accounts which are offset by the liquidation of services to customers as identified with WBS 3001.A7.01 – 3001.A7.03.

**Impacts - Cumulative Cost Variance:** CTD CV is primarily due to approved funding and priority list scope being divergent from the baseline during FY 2013 – FY 2017. Because the work scope is primarily level of effort, the CTD CV is not a predictive indicator for future performance. The amount of support provided in the future will be dependent upon the RL approved funding and priority list scope.



Table 6-1, cont. Format 5, DD Form 2734/5, Explanations and Problem Analysis

1. Contractor	2. Contract		3. Program	4. Report Period
a. Name Mission Support Alliance	a. Name Mission Support Contract		a. Name Mission Support Contract	a. From (2017/8/21)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2017/9/30)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

**Corrective Action - Cumulative Cost Variance:**

For FY 2009 – FY 2012, MSA has incorporated negotiated contract variance proposals into the contract baseline. For FY 2013 through FY 2016, MSA submitted these proposals in September. For FY 2017, MSA will evaluate the delta values between the contract baseline and RL funding values to determine if a change proposal is warranted. Note, the FY 2009 through FY 2016 proposals exclude WBS 3001.08-Infrastructure Reliability Projects.

**Cumulative Schedule Variance:**

**3001.08.01 Water System** – Favorable CTD SV is due to efficiencies during construction execution in both subcontractor performance and project support for projects L-419, “24in Line Renov/Replace frm 2901U to 200E” and L-868, “Raw Water Fire Protection Loop for LAWPS”. Efficiencies include contractor owned equipment allowing multiple construction activities to be performed concurrently, contractor resource availability allowing for crew sizes substantially larger than anticipated, and optimal soil conditions during excavations because of minimal pit runs and no black sand encountered.

**3001.08.02 Sewer System** – Unfavorable CTD SV is due to delays in awarding the construction subcontract due to FY17 funding being reallocated to other projects, delays in receiving Ecology’s approval on the General Sewer Plan, and delays in receiving Consent Package approval. SV is forecast to be recovered in FY18 when all approvals are received and funding is available to release the remaining construction scope.

**Impacts - Cumulative Schedule Variance:** Impacts to Reliability Projects are minimal because each is an independent stand-alone project.

**Corrective Action – Cumulative Schedule Variance:** No corrective action is required because each project is stand-alone.

**Variance at Complete:**

During October of 2011, MSA completed re-aligning the baseline to the negotiated contract, and using the approved change control process, implemented the re-aligned baseline data for the start of FY 2012. RL provided approval of the baseline data for reporting progress and also provided an approved and funded priority list of items for MSA work scope. The VAC is primarily due to the RL approved funding and priority list scope being divergent from the baseline for FY 2013, FY 2014, FY 2015, FY 2016 and FY 2017.

After the original submittal of the FPR, it was determined that MSA had incorrectly factored the cost of the Hanford Site Pension Plan (HSPP) and the Hanford Employee Welfare Trust (HEWT) into the labor rates. This was disclosed to MSA in the Source Selection Evaluations Board’s (SEB) Debrief of the Mission Support Contract (MSC) in May 2009.



Table 6-1, cont. Format 5, DD Form 2734/5, Explanations and Problem Analysis

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Mission Support Alliance	a. Name Mission Support Contract	a. Name Mission Support Contract	a. From (2017/8/21)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728	b. Phase - Operations	b. To (2017/9/30)
	c. Type CPAF	d. Share Ratio NO X YES	
5. Evaluation			

MSA received contract modifications associated with pension cost and labor adder adjustments for FY 2009 through FY 2016 which increased the contract value. The FY 2016 pension and labor adder proposal was negotiated and incorporated in April 2017. At the request of RL, the labor and pension proposals are submitted annually at fiscal year-end. Since the FY 2017 variances associated with labor and pension have continued to grow during the fiscal year a proposal will be submitted in FY 2018.

**Impacts – At Complete Variance:**

The VAC is primarily due to the approved funding and priority list scope being divergent from the baseline during FY 2013 – FY 2017. Because the work scope is primarily level of effort, the VAC is not a predictive indicator for future performance. The amount of support provided in the future will be dependent upon RL approved funding and priority list scope.

**Corrective Action - At Complete Variance:**

For FY 2009 – FY 2012, MSA has incorporated negotiated contract variance proposals into the contract baseline. For FY 2013 through FY 2016, MSA submitted a contract variance proposal in September. For FY 2017, MSA will evaluate the delta values between the contract baseline and RL funding values to determine if a change proposal is warranted. Note, the FY 2009 through FY 2016 proposals exclude WBS 3001.08-Infrastructure Reliability Projects.

**Negotiated Contract Changes:**

The Negotiated Contract Cost for September 2017 increased by \$1.1M from \$3,459.5M to \$3,460.6M. This was primarily a result of Contract Mod 626 - Definitization of Site Air Modeling Project Proposal and Fee and Contract Mod 630 - Definitization of Long Term Stewardship 100-N & 100-IU-6/4B & 100-N Area Surveillance & Maintenance for FY 2017 through FY 2019 & Fee.

**Changes in Estimated Cost of Authorized Unpriced Work:**

The Authorized Unpriced Work (AUW) for September 2017 remained at \$0M.

**Changes in Estimated Price:**

The Estimated Price of \$3,817.1M is based on the Most Likely Management Estimate at Completion (MEAC) of \$3,606.8M and fee of \$210.4M. The Most Likely MEAC reflects recognition of significant additional work scope in FY 2009 through FY 2012 related to the American Recovery and Reinvestment Act of 2009 (ARRA) support activities to site contractors, and other DOE-authorized activities beyond the original contract assumptions. BCRs were implemented for the Cost Variance Contract Modifications received for FY 2009 thru FY 2012 in January 2015. MSA has prepared and submitted the cost variance proposals for FY13-FY16, which will increase the



Table 6-1, cont. Format 5, DD Form 2734/5, Explanations and Problem Analysis

1. Contractor	2. Contract		3. Program	4. Report Period
a. Name Mission Support Alliance	a. Name Mission Support Contract		a. Name Mission Support Contract	a. From (2017/8/21)
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	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

negotiated contract costs. These are currently under review by DOE. Since the FY 2017 funding is higher than the Contract Budget Base, it is expected that the FY 2017 variance will exceed the 10% threshold from Section B.5 of the MSA contract.

**Differences between Current Month and Prior Month EAC's Format 1, Column (13) (e):**

During August 2017, the Estimate at Completion (EAC) increased by \$4.8M from \$3,602.0M to \$3,606.8M; \$3.8M in the Performance Measurement Baseline (PMB), \$0.6M in the non-PMB and \$0.5M in Management Reserve. The PMB increase is primarily the result of updates to the EAC for year-end cost pass backs and Public Works Water/Sewer projects where additional labor was required to complete a project and subcontract costs were higher than planned due to sewer repairs being performed by construction forces rather than plant forces. The non-PMB EAC changes for FY 2017 are primarily based on trending data from the Other Hanford Contractor (OHC), CHPRC. Based on the September 2017 costs, the non-PMB EAC was increased.

**Changes in Undistributed Budget:**

The Undistributed Budget of \$0M did not change this reporting period.

**Changes in Management Reserve:**

The Management Reserve for September 2017 increased by \$0.5M from \$3.3M to \$3.7M. The increase was primarily due to a Risk Review, which resulted in a Risk Management reserve for a Reliability Project. The implementation was documented in VMSA-17-023 – Move Budget from FY 2018 Out-Year Planning Package to Project L-894 for Definitive Design & Construction and to Management Reserve for Risk.

**Differences in the Performance Measurement Baseline:**

This reporting period the Performance Measurement Baseline increased by \$0.6M from \$2,378.8M to \$2,379.4M. The increase is primarily the result of BCR# VMSA-17-028 - Mod 626 – Definitization of Site Air Modeling Project Proposal and Fee and VSWS-17-008 Rev 1 - Mod 630 – Definitization of Long Term Stewardship 100-N & 100-IU-6/4B & 100-N Area Surveillance & Maintenance for FY 2017 through FY 2019 & Fee.

The following BCRs related to Reliability Project adjusted time phasing, but did not change the contract value:

- VMSA-17-023 – Move Budget from FY 2018 Out-Year Planning Package to Project L-894 for Definitive Design & Construction and to Management Reserve for Risk



Table 6-1, cont. Format 5, DD Form 2734/5, Explanations and Problem Analysis

1. Contractor	2. Contract		3. Program	4. Report Period
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	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
<b>5. Evaluation</b>				
<ul style="list-style-type: none"> <li>VMSA-17-025 – Create a Level 4 and Four Level 5 WBS for Project S-245, Life Fire Shoot House and Move Reliability Project Out-Year Planning Package Budget</li> </ul> <p><b><u>Differences in the Non - Performance Measurement Baseline:</u></b> This reporting period the non-PMB remained at \$1,077.4M.</p> <p><b><u>Best/Worst/Most Likely Management Estimate at Completion (MEAC):</u></b> The Best Case MEAC assumes the completion of the approved work scope at the current negotiated contract value consistent with the Contract Budget Base. The Most Likely MEAC reflects the EAC including management reserve. The Worst Case Scenario assumes a 5% increase to the Most Likely MEAC case scenario.</p>				



**7.0 USAGE-BASED SERVICES/DIRECT LABOR ADDER SUMMARY**

The Direct Labor Adder (DLA) collects the cost of centralized management, support from others, craft indirect time, and non-labor cost such as training and facilities. These costs are distributed via a rate on direct labor. Usage-Based Services (UBS) are services liquidated to customers (internal and external). The UBS cost is associated with a service and distributed on a unit rate to the customer based upon requests (“pay by the drink”).

Table 7-1. Usage-Based Services/Direct Labor Adder Summary (dollars in thousands).

Fiscal Year 2017 to Date – September 2017					
Account Description	BCWS	BCWP	ACWP	CV	Liquidation
<b>Direct Labor Adder</b>					
Software Engineer Services DLA (3001.03.02.03)	\$2,574.9	\$2,574.9	\$2,479.8	\$95.1	\$(2,479.8)
Content & Records Management DLA (3001.03.01.04)	\$889.7	\$889.7	\$808.0	\$81.7	\$(808.0)
Transportation DLA (3001.04.06.02)	\$1,905.9	\$1,905.9	\$7,082.0	\$(5,176.1)	\$(7,082.0)
Maintenance DLA (3001.04.05.02)	\$6,598.2	\$6,598.2	\$9,770.1	\$(3,171.9)	\$(9,770.1)
Janitorial Services DLA (3001.04.05.03)	\$1,158.8	\$1,158.8	\$1,157.9	\$0.9	\$(1,157.9)
<b>Total Direct Labor Adder</b>	<b>\$13,127.5</b>	<b>\$13,127.5</b>	<b>\$21,297.8</b>	<b>\$(8,170.3)</b>	<b>\$(21,297.8)</b>

ACWP = Actual Cost of Work Performed. CV = Cost Variance BAC = Budget at Completion.  
 BCWP = Budgeted Cost of Work Performed. BCWS = Budgeted Cost of Work Scheduled.



Table 7-1, cont. Usage-Based Services/Direct Labor Adder Summary (dollars in thousands).

Fiscal Year 2017 to Date – September 2017					
Account Description	BCWS	BCWP	ACWP	CV	Liquidation
<b>Usage Based Services</b>					
Training (3001.01.04.02)	\$10,743.6	\$10,743.6	\$15,638.5	\$(4,894.9)	\$(15,638.5)
HRIP (3001.02.04.02)	\$6,234.2	\$6,234.2	\$4,090.9	\$2,143.3	\$(4,090.9)
Dosimetry (3001.02.04.03)	\$6,385.6	\$6,385.6	\$4,646.7	\$1,738.9	\$(4,646.7)
Information Technology Services (3001.03.07.01)	\$30,087.6	\$30,087.6	\$31,154.8	\$(1,067.2)	\$(31,154.8)
Work Management (3001.04.13.01)	\$-	\$-	\$553.7	\$(553.7)	\$(553.7)
Courier Services (3001.04.15.02)	\$241.0	\$241.0	\$203.2	\$37.8	\$(203.2)
Occupancy (3001.04.14.06)	\$7,543.0	\$7,543.0	\$9,232.7	\$(1,689.7)	\$(9,232.7)
Crane & Rigging (3001.04.08.02)	\$11,133.8	\$11,133.8	\$13,062.8	\$(1,929.0)	\$(13,062.8)
Guzzler Trucks (3001.04.06.03)	\$87.2	\$87.2	\$-	\$87.2	\$-
Fleet (3001.04.07.02)	\$8,577.7	\$8,577.7	\$16,540.3	\$(7,962.6)	\$(16,540.3)
<b>Total UBS</b>	\$81,033.7	\$81,033.7	\$95,123.6	\$(14,089.9)	\$(95,123.6)
<b>Total DLA / UBS</b>	\$94,161.2	\$94,161.2	\$116,421.4	\$(22,260.2)	\$(116,421.4)

ACWP = Actual Cost of Work Performed.

CV = Cost Variance

BAC = Budget at Completion.

BCWP = Budgeted Cost of Work Performed.

BCWS = Budgeted Cost of Work Scheduled.

**FYTD Cost Variance (-\$22.3M)** – Transportation DLA costs exceeded the plan in response to FY 2017 projects such as the Stevens Center/DOE moves, the increased winter weather support that was required this fiscal year, and an increase in site O&M support, such as Central Plateau effort. The Maintenance DLA cost impact was a result of an increased headcount to support project work across the site including PFP shutdown. Occupancy volume increased due to the inclusion of 2261 Stevens and 1981 Snyder facilities per the IT scope transition. Overall, the Usage Based and Direct Labor Adder service demand was far in excess of contract baseline assumptions, especially in Fleet count/services, GSA vehicle count, and training classroom student volume.



### 8.0 RELIABILITY PROJECT STATUS

Activity in September was centered on continuing progress on projects carried over from FY 2016. (Table 8-1 below.)

Table 8-1. Current Active Reliability Projects Summary

Work Scope Description (RL-40 Projects)	Projects to be Completed (\$000's)															
	Contract to Date - Performance								Project Lifecycle				Complete Dates			
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	CSPI	BAC	EAC	VAC	% Complete	Complete Date	Forecast Date	Schedule at Complete	VAC Cost
L-830, Filter Plant Filter Ctrl Sys Upgrade	1,455.2	1,446.1	2,232.8	(9.1)	(786.7)	1.0	0.6	0.8	1,455.2	2,251.4	(796.2)	99.4%	4/13/17	10/12/17	R	R
L-419, 24in Line Renov/Replace from 2901U to 200E	3,055.9	3,672.0	1,936.1	616.1	1,735.9	1.2	1.9	1.5	3,795.5	2,098.9	1,696.5	96.7%	3/29/18	2/14/18	G	G
L-868, Raw Water Fire Protection Loop for LAWPS	1,135.1	1,227.1	569.2	92.1	658.0	1.1	2.2	1.6	1,227.1	569.2	658.0	100.0%	1/2/18	9/28/17	G	G
L-894, Raw Water Cross Connection Isolation 200E/W	896.7	890.5	488.8	(6.2)	401.7	1.0	1.8	1.4	8,027.5	7,551.3	476.2	11.1%	5/6/19	5/23/19	Y	G
L-895, Fire Protection Infrastructure for Plateau Raw Water	194.2	194.2	102.6	0.0	91.6	1.0	1.9	1.4	977.0	887.9	89.1	19.9%	7/2/18	7/2/18	G	G
L-357, Replace 12" Potable Water Line to 222-S Lab	81.5	75.0	48.6	(6.4)	26.5	0.9	1.5	1.2	260.8	173.1	87.7	28.8%	2/14/18	1/23/18	G	G
L-853, 200E Sewer Flow Equalization Facility	1,223.8	1,182.4	1,110.4	(41.4)	72.0	1.0	1.1	1.0	5,713.2	5,208.4	504.8	20.7%	1/28/19	1/28/19	G	G
L-854, 200E Sewer Consolidations	890.2	819.5	774.9	(70.7)	44.6	0.9	1.1	1.0	6,033.0	5,033.3	999.7	13.6%	11/29/18	11/29/18	G	G
L-789, Prioritize T&D Sys Wood PP Test & Replace	718.6	643.1	601.0	(75.5)	42.0	0.9	1.1	1.0	1,250.0	976.1	273.9	51.4%	5/22/18	2/15/18	G	G
L-612, 230kV Transmission System Reconditioning and Sustainability Repairs	1,091.2	1,120.2	749.0	28.9	371.1	1.0	1.5	1.3	1,562.4	1,206.9	355.5	71.7%	5/23/19	6/9/20	R	G
L-777, Chip SI Rt 4s, 618-10 Wst Site to HR Road	1,722.3	1,723.2	1,763.2	0.9	(39.9)	1.0	1.0	1.0	1,723.2	1,763.2	(39.9)	100.0%	10/10/17	9/7/17	G	G
L-775, Chip SI Rt 4s, Canton Ave to Y Barricade	1,863.7	1,864.7	1,855.3	0.9	9.4	1.0	1.0	1.0	1,864.7	1,855.3	9.4	100.0%	10/10/17	9/7/17	G	G
L-776, Chip SI Rt 4s, Y Brrcd to 618 Wst St Ntrnc	1,765.3	1,766.3	1,722.0	0.9	44.3	1.0	1.0	1.0	1,766.3	1,722.0	44.3	100.0%	10/10/17	9/7/17	G	G
S-245, Live Fire Shoot House	3.3	3.3	2.0	0.0	1.3	1.0	1.7	1.3	3,627.2	3,627.2	0.1	0.1%	10/23/18	10/23/18	G	G
L-761, Phase 2a Procure, Install, & Closeout	2,161.9	2,162.2	2,579.4	0.2	(417.2)	1.0	0.8	0.9	2,162.2	2,579.4	(417.2)	100.0%	12/29/16	9/18/17	R	R
ET-51, HLAN Network Upgrade - Phase 2A	15.8	12.7	14.9	(3.2)	(2.3)	0.8	0.8	0.8	2,961.2	2,959.4	1.8	0.4%	6/19/18	7/16/18	Y	G
<b>RL-40 Total</b>	<b>18,274.9</b>	<b>18,802.5</b>	<b>16,550.1</b>	<b>527.6</b>	<b>2,252.4</b>	<b>1.0</b>	<b>1.1</b>	<b>1.1</b>	<b>44,406.5</b>	<b>40,463.0</b>	<b>3,943.5</b>					

Variance at Complete Cost Performance		Schedule at Complete Performance	
OK - G	Underspent or 1-10% over	OK - G	On schedule
Over Spent Y	11-30% or \$100K Over Spent	Behind Y	Within 30 days
Over Spent R	>30% or \$300K Over Spent	Behind R	Critical Path at Risk



## RELIABILITY STATUS, CONT.

### Reliability Projects Variance Explanations

#### Contract-to-Date (CTD) Schedule Variances (SV):

- L-830, *Filter Plant Filter Control System Upgrade*: 90% design comments taking longer than planned to incorporate, and changes during construction due to less than adequate design. Additionally, construction efficiency suffered as a result of the inadequate design issues, labor availability issues, and weather related delays. The schedule variance is not recoverable.
- L-419, *24in Line Renov/Replace from 2901U to 200E*: Favorable SV is due to early performance of the pipeline excavation and installation ahead of the as-planned start.
- L-868, *Raw Water Fire Protection Loop for LAWPS*: Favorable SV is due primarily to efficiencies during construction execution in both subcontractor performance and project support. Efficiencies include contractor-owned equipment (multiple construction activities performed concurrently), contractor resource availability (crew sizes substantially larger than anticipated), and optimal soil conditions during excavations (a minimal pit run and no black sand encountered).
- L-854, *200E Sewer Consolidations*: Unfavorable SV is due to delays in awarding the construction subcontract (the FY 2017 funding was reallocated to other projects), delays in receiving Ecology's approval on the General Sewer Plan, and delays in receiving consent package approval. The SV is forecast to be recovered in FY 2018 when all approvals are received and funding is available to release the remainder of construction scope.
- L-789, *Prioritize T&D Sys Wood PP Test & Replace*: Unfavorable SV is due to Tasks 1 & 2 starting later than planned; however, the vendor schedule shows the activities finishing earlier than planned.

#### CTD Cost Variances (CV):

- L-830, *Filter Plant Filter Control System Upgrade*: Unfavorable CV is due to design requiring additional funding for  
1) resolving comments provided at the initial 90% design submittal, 2) in-house engineering required to complete material procurement, 3) Operational Test Procedures (OTP) and Acceptance Test Procedures (ATP), 4) increased work package planning cost, and 5) construction cost not anticipated (scaffolding, rigging, outage costs, confined space inefficiencies, and extensive work planning



efforts). Construction costs increased due to insufficient design details, work package planning, and unavailable materials. In addition, issues identified during performance of the ATP/OTP have further increased cost estimates. The cost variance is not recoverable.

- L-419, *24in Line Renov/Replace from 2901U to 200E*: Favorable CV is due to the fixed price contractor work scope being performed at significantly lower cost than budgeted, and work proceeding ahead of schedule.
- L-868, *Raw Water Fire Protection Loop for LAWPS*: Favorable CV is due to receiving favorable bids on design and construction contracts, and efficiencies in project support associated with optimal field conditions and encountering minimal underground interferences.
- L-894, *Raw Water Cross Connection Isolation 200E/W*: Favorable CV is due to the engineering study report costing less than planned and the conceptual design utilizing fewer resources than originally anticipated which were partially offset by increased costs for the 60% design.
- L-895, *Fire Protection Infrastructure for Plateau Raw Water*: Favorable CV is due to the engineering and support costs received during conceptual design being lower than planned.
- L-830, *Filter Plant Filter Control System Upgrade*: Unfavorable CV is due to design requiring additional funding for  
1) resolving comments provided at the initial 90% design submittal, 2) in-house engineering required to complete material procurement, 3) Operational Test Procedures (OTP) and Acceptance Test Procedures (ATP), 4) increased work package planning cost, and 5) construction cost not anticipated (scaffolding, rigging, outage costs, confined space inefficiencies, and extensive work planning efforts). Construction costs increased due to insufficient design details, work package planning, and unavailable materials. In addition, issues identified during performance of the ATP/OTP have further increased cost estimates. The cost variance is not recoverable.
- L-419, *24in Line Renov/Replace from 2901U to 200E*: Favorable CV is due to the fixed price contractor work scope being performed at significantly lower cost than budgeted and work proceeding ahead of schedule.
- L-868, *Raw Water Fire Protection Loop for LAWPS*: Favorable CV is due to receiving favorable bids on design and construction contracts, efficiencies in project support



associated with optimal field conditions, and encountering minimal underground interferences.

- L-894, *Raw Water Cross Connection Isolation 200E/W*: Favorable CV is due to the engineering study report costing less than planned and the conceptual design utilizing fewer resources than originally anticipated which were partially offset by increased costs for the 60% design.
- L-895, *Fire Protection Infrastructure for Plateau Raw Water*: Favorable CV is due to the engineering and support costs received during conceptual design being lower than planned.

## **Variances at Completion (VAC) (Threshold: +/- \$750K):**

- L-830, *Filter Plant Filter Control System Upgrade*: Unfavorable VAC is due to design requiring additional funding for:  
1) resolving comments provided at the initial 90% design submittal, 2) in-house engineering required to complete material procurement, 3) Operational Test Procedures (OTP) and Acceptance Test Procedures (ATP), 4) increased work package planning cost, and 5) construction cost not anticipated (scaffolding, rigging, outage costs, confined space inefficiencies, and extensive work planning efforts). Construction costs increased due to insufficient design details, work package planning, and unavailable materials. In addition, issues identified during performance of the ATP/OTP have further increased cost estimates. The VAC reduction from the previous month is due to work efficiencies by both the electrical and mechanical construction maintenance personnel. The unfavorable VAC is not recoverable.
- L-419, *24in Line Renov/Replace from 2901U to 200E*: Favorable VAC is due to cost savings during the design phase, vegetation clearing performed for significantly less than budgeted, the pipeline installation contract bid significantly lower than budgeted, and the contractor working efficiently.
- L-868, *Raw Water Fire Protection Loop for LAWPS*: Favorable VAC is due to efficiencies in project support, and receiving very competitive bids on design and construction contracts.
- L-894, *Raw Water Cross Connection Isolation 200E/W*: Favorable VAC is due to the engineering study report costing less than planned, conceptual design utilizing less resources than originally planned, and a forecasted underrun in definitive design.



- L-895, *Fire Protection Infrastructure for Plateau Raw Water*: Favorable VAC is due to the engineering and support costs received being lower than planned.
- L-357, *Replace 12" Potable Water Line to 222-S Lab*: Favorable VAC is due to efficiencies in both subcontractor design efforts and project support. Efficiencies are associated with upfront planning performed by the engineering project support team with pre-conceptual line routing and clarifying operational requirements. The Integrated Project Team employed early communication to gain cooperation with the other Hanford contractors to address concerns/design inputs to reduce potential rework.
- L-853, *200E Sewer Flow Equalization Facility*: Favorable VAC is due to efficiencies in both subcontractor design efforts and project support. Efficiencies are associated with using historical geotechnical reports in lieu of performing a new geotechnical survey, and weekly design workshops to address concerns and provide timely design inputs to minimize rework. Construction efficiencies of over \$400K are forecast due to having received fixed-price construction proposals and issuing the intent to award.
- L-854, *200E Sewer Consolidation*: Favorable VAC is due to efficiencies in both subcontractor design efforts and project support. Efficiencies are associated with using historical geotechnical reports in lieu of performing a new geotechnical survey, and weekly design workshops to address concerns and provide timely design inputs to minimize rework. Construction efficiencies of over \$900K are forecast due to having received fixed-price construction proposals and issuing the intent to award.
- L-789, *Prioritize T&D Sys Wood PP Test & Replace*: Favorable VAC is due to the test and treat contract (tasks 1 & 2) performed more efficiently than planned.
- L-612, *230kV Transmission System Reconditioning and Sustainability Repairs*: Favorable VAC is due to significant cost efficiencies in completing the subcontracted conceptual design.
- L-761, *Replace RFAR, Phase 2a - Procure, Install, & Closeout*: Unfavorable VAC is due to the upward escalation of project cost to approximately \$21M. Options being evaluated to lower the total project cost include combining the Radio Fire Alarm Receiver (RFAR) and Fire Alarm Control Unit projects (Projects L-761 and L-863). The replanning effort is forecasted to be completed in FY 2018. Upon completion of planning documents, an estimate, schedule, and scope definition will be developed to support a restart BCR.

Table 8 -2. Reliability Projects Schedule

RPSUM CU - Summary RP Schedule for Melodee - Current Layout: MSA - Summ RP Sched - Melodee - CU		Mission Support Alliance								Page 1 of 2				
Activity ID	Activity Name	OD	RD	% Comp	Baseline Start	Baseline Finish	Forecast Start	Forecast Finish	2015	2016	2017	2018	2019	
ET-51	ET-51, HLAN Network Upgrade - Phase 2A	263	198	0.4%	05-Jun-17	19-Jun-18	05-Jun-17 A	16-Jul-18						
L-357	L-357, Replace 12" Potable Water Line to 222-S Lab	156	77	28.8%	03-Jul-17	14-Feb-18	29-Jun-17 A	23-Jan-18						
L-419	L-419, 24" Line Renovation/Replacement from 2901U to 200E	152	93	96.7%	10-Aug-15	29-Mar-18	10-Aug-15 A	14-Feb-18						
L-612	L-612, 230kV Transmission System Reconditioning and Sustainability Upgrades	352	677	71.7%	31-Aug-15	23-May-19	31-Aug-15 A	09-Jun-20						
L-761 Ph2a	L-761, Replace RFAR Phase 2a	154	0	100%	20-Jul-15	29-Dec-16	20-Jul-15 A	18-Sep-17 A						
L-775	L-775, Chip Seal RT 4s, Canton Ave to Y Barricade	186	0	100%	10-Aug-15	10-Oct-17	10-Aug-15 A	07-Sep-17 A						
L-776	L-776, Chip Seal Rt 4S Y Brrcd to 618 Wst St Ntrnc	72	0	100%	15-Jun-16	10-Oct-17	21-Jun-16 A	07-Sep-17 A						
L-777	L-777, Chip Seal RT 4s, 618-10 Wst Site to HR Road	186	0	100%	24-Aug-15	10-Oct-17	10-Aug-15 A	07-Sep-17 A						
L-789	L-789, Prioritized T&D System Wood Pole Upgrades	203	94	51.4%	10-Aug-15	22-May-18	10-Aug-15 A	15-Feb-18						
L-830	L-830, Filter Plant Filter Control System Upgrade	125	9	99.4%	29-Jun-15	13-Apr-17	29-Jun-15 A	12-Oct-17						
L-853	L-853, 200E Sewer Flow Equalization Facility	309	332	20.7%	17-Aug-15	28-Jan-19	17-Aug-15 A	28-Jan-19						
L-854	L-854, 200E Sewer Consolidations	283	293	13.6%	17-Aug-15	29-Nov-18	17-Aug-15 A	29-Nov-18						
L-868	L-868, Raw Water Fire Protection Loop for LAWPS	155	0	100%	04-Jan-16	02-Jan-18	14-Dec-15 A	28-Sep-17 A						
L-894	L-894, Raw Water Cross Connection Isolation 200E/W	376	414	11.1%	29-Aug-16	06-May-19	29-Aug-16 A	23-May-19						

Remaining Work  
 Baseline

**MSC - Reliability Projects  
Summary Schedule  
Data Date: 30-Sep-17**



Table 8 -2. (Cont.) Reliability Projects Schedule

RPSUM CU - Summary RP Schedule for Melodee - Current Layout: MSA - Summ RP Sched - Melodee - CU		Mission Support Alliance							Page 2 of 2				
Activity ID	Activity Name	OD	RD	% Comp	Baseline Start	Baseline Finish	Forecast Start	Forecast Finish	2015	2016	2017	2018	2019
L-895	L-895, Fire Protection Infrastructure for Plateau Raw Water	375	189	19.9%	09-Jan-17	02-Jul-18	09-Jan-17 A	02-Jul-18					
S-245	S-245, Live Fire Shoot House	375	268	0.1%	21-Sep-17	23-Oct-18	09-Jan-17 A	23-Oct-18					

 Remaining Work  Baseline	<b>MSC - Reliability Projects</b> <b>Summary Schedule</b> <b>Data Date: 30-Sep-17</b>	
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## 9.0 BASELINE CHANGE REQUEST LOG

### Baseline Change Request Log for September

Thirteen Baseline Change Requests (BCRs) were processed in September.

Two BCRs incorporated contract modifications:

- VMSA-17-028 - Mod 626 – Definitization of site air modeling project proposal and fee
- VSWS-17-008 Rev 1 - Mod 630 – Definitization of long term stewardship 100-N and 100-IU-6/4B & 100-N area surveillance and maintenance for FY 2017 through FY 2019 and fee

Two BCRs related to reliability projects:

- VMSA-17-023 – Move budget from FY 2018 out-year planning package to project I-894 for definitive design and construction and to management reserve for risk
- VMSA-17-025 – Create a Level 4 and Four Level 5 WBS for project S-245, life fire shoot house and move reliability project out-year planning package budget

Nine BCRs were administrative in nature:

- VMSA-17-004 Rev 11 – Administrative BCR – create lower level task order (llto) wbs for cost collection established in the month of September
- VMSA-17-026 – Move/rename pre-Manhattan project facilities planning package from RL-0201 to SWS (FY 2018 – FY 2019) & Move FY 2017 RL-40 budget balance to SWS (FY 2018)
- VMSA-17-027 – Move the reliability project and CENRTC planning packages from FY 2018 to FY 2019 and from RL-40 to RL-0201
- VMSA-17-029 – Administrative BCR – move RL-20 and RL-40 reliability project management reserve from FY 2017 to FY 2018 in the contract baseline and change all management reserve to RL-0201 in FY 2018
- VRL0201RP-17-005 – Move FY 2017 planning package budget for L-888 to FY 2018 L-888 planning package
- VSWS-17-010 – Administrative BCR – Mod 596, incorporate contract changes to section j-2.10, long term stewardship transfers in the technical baseline



- VSWS-17-011 – Create a level 5 WBS for MSA procedures and move budget from safety culture/analysis to Training and Conduct of Operations beginning in FY 2017
- VSWS-17-012 – Create a level 5 WBS for ELM support and move budget from HAMMER to Training & Conduct of Operations program management (FY 2018 and FY 2019)
- VSWS-17-013 – Create three Level 4 & seven Level 5 WBSs and restructure Environmental Safety & Health within Level 3 WBSs



Table 9-1. Consolidated Baseline Change Log

Consolidated Baseline Change Log											
\$ in thousands											
						POST CONTRACT BUDGET					
PBS / Other	Reporting Baseline	Contract PMB	Contract PMB Mgmt Reserve	Contract Performance Budget (CPB)	Cum Contract Period	FY17 Budget	FY17 Management Reserve	Post Contract Budget	Post Contract Mgmt Reserve	Total Lifecycle	Cum Lifecycle Budget
<b>Prior PMB Total</b>	<b>Aug 2017</b>	1,230,506		1,230,506	1,230,506	250,120		1,148,243		2,378,749	2,378,749
VMSA-17-004 Rev 11						0		0		0	2,378,749
VMSA-17-023						(36)		(463)		(463)	2,378,286
VMSA-17-025						3		0		0	2,378,286
VMSA-17-026						(231)		0		0	2,378,286
VMSA-17-027						0		0		0	2,378,286
VMSA-17-028						282		405		405	2,378,691
VRL0201RP-17-005						(314)		0		0	2,378,691
VSWS-17-008 Rev 1						46		734		734	2,379,425
VSWS-17-010						0		0		0	2,379,425
VSWS-17-011						0		0		0	2,379,425
VSWS-17-012						0		0		0	2,379,425
VSWS-17-013						0		0		0	2,379,425
	<b>Sep 2017</b>	1,230,506		1,230,506	1,230,506	249,871		1,148,919		2,379,425	
<b>Prior Non-PMB Total</b>	<b>Aug 2017</b>	604,007		604,007		99,329		473,433		1,077,441	1,077,441
VMSA-17-004 Rev 11						0		0		0	1,077,441
<b>Revised Non-PMB Total</b>	<b>Sep 2017</b>	604,007		604,007		99,329		473,433		1,077,441	
<b>Total Contract Performance Baseline</b>	<b>Sep 2017</b>	1,834,513		1,834,513	1,834,513			1,622,352		3,456,865	
<b>Management Reserve</b>	<b>Aug 2017</b>		0	0			3,199		3,279	3,279	3,279
VMSA-17-023							0		463	463	3,742
VMSA-17-029							(3,199)		0	0	3,742
<b>Revised Management Reserve</b>	<b>Sep 2017</b>		0	0			0		3,742	3,742	
<b>Total Contract Budget Base</b>				1,834,513				1,626,094		3,460,607	
<b>Prior Fee Total</b>	<b>Aug 2017</b>	109,961		109,961		21,706		100,328		210,289	210,289
VMSA-17-028						21		29		29	210,318
VSWS-17-008 Rev 1						2		43		43	210,360
<b>Revised Fee Total</b>	<b>Sep 2017</b>	109,961		109,961		21,729		100,399		210,360	
<b>Change Log Total</b>	<b>Sep 2017</b>			1,944,473				1,726,493		3,670,967	



## 10.0 RISK MANAGEMENT

September risk management efforts, aiding in completing the overall MSA risk determination, included the following:

- The Risk Management Board reviewed and approved the proposed new and closed risks, and reviewed the overall company risk posture associated with August 2017 data. The following items were approved:
  - Seven new mission risks were approved: three related to MSA Environmental, Safety, & Health, two related to MSA Training & Conduct of Operations, and one related to MSA Public Works.
  - One new reliability project risk was approved for Projects L-612, *230kV Transmission System Sustainability Upgrades*.
  - Twenty closed reliability project risks: three for Project L-419, *24" Line Renovation/ Replacement from 2901U to 200E*; one related to Project L-775, *Chip Seal Route 4S, Canton Ave to the Wye Barricade*; one related to Project L-776, *Chip Seal Route 4S, Wye Barricade to 618-10 Waste Site*; one related to Project L-777, *Chip Seal Route 4S, 618-10 Waste Site to Horn Rapids Road*; twelve related to Project L-830, *Filter Plant Filter Control System Upgrade*; and two related to L-868, *Raw Water Fire Loop for LAWPS*.
  - Three reliability project risks were re-characterized: one related to Project L-357, *Replace 12-in. Potable Water Line to 222-S Lab*; one related to Project L-853, *200E/200W Force Main*; and one related to Project L-854, *Raw Water Cross-Connection Isolation 200E/W 200E Sewer Consolidations*.
- Risk Reporting – In September, in accordance with the MSC-PLN-ENG-42375, *Hanford Mission Support Contract Risk Management Plan*, the monthly Risk Management report was submitted to the RL contracting office. This report consisted of August data.
- Mission Risk Management:
  - Mission Risk Elicitation – Risk Management facilitated a Risk Elicitation for Information Management and Emergency Services related to the Emergency 911 system. A draft risk is in development.
  - Operation Change Control Board (OCCB) Packet Review: Completed standard review of OCCB packet and assessed for risks for new work scope.



- Project Risk Management:
  - Monte Carlo Quantitative Risk Analysis: Completed initial and final Monte Carlo quantitative analyses for Project L-894, *Raw Water Cross-Connection Isolation 200E/W*. The analysis report was approved.
  - Reliability Project Risk Elicitation: Risk Management facilitated a Premortem Risk Elicitation for Project S-245, *New Live Fire Shoot House*. A risk register is in development.
  - Reliability Project Risk Review and Update: The monthly risk review was performed with the reliability project managers to review and revise the reliability project risk registers for all active projects. Updates to these risk registers were captured as appropriate.
  - Risk Management reviewed the monthly Operations Project Reports for each reliability project, and any related key risks for monthly reporting to DOE.
- Other Support:
  - Risk Register Database Software Solution Initiative: MSA Risk Management received a demo of the current state of the Enterprise Risk and Opportunity Management System (EROMS) being developed for Washington River Protection Solutions (WRPS). MSA supported WRPS' presentation to the Contractor Interface Board (CIB) to share the current state and planned path forward. MSA and WRPS have determined a path forward for sharing the EROMS software once WRPS' development project is complete.
  - MSA Risk Management Plan (RMP) Annual Review and Update: The RMP was updated and has begun the review cycle. Comment resolution and formal update to follow.



## 11.0 DASHBOARD SUMMARY

Table 11-1. Performance Evaluation and Measurement Plan

September FY 2017							
2017 Performance Evaluation and Measurement Plan							
Deliverables	Plan	MSA	Status				
			YTD	SEP			
<b>1.0 Effective Site Cleanup</b>							
1.1 Enable mission contractors to achieve their cleanup mission by delivering timely service and reliable infrastructure that support customer key milestones and regulatory commitments.	1.1.1	Demonstrate that the following performance measure targets were met.	9/30/2017	Von Bargaen	On schedule	On schedule	
		a Biological Controls – Pest Removal		Synoground	On schedule	On schedule	
		b Biological Controls – Tumbleweed Removal		Synoground	On schedule	On schedule	
		c Biological Controls – Vegetation		Synoground	On schedule	On schedule	
		d Crane and Crew Support		Von Bargaen	On schedule	On schedule	
		e Electrical – Power Availability		Synoground	On schedule	On schedule	
		f Facilities Maintenance		Von Bargaen	On schedule	On schedule	
		g Fire Protection System Maintenance		Walton	On schedule	On schedule	
		h Fleet Services – Heavy Equipment (Cranes)		Von Bargaen	On schedule	On schedule	
				Fleet Services – Heavy Equipment (Evacuators)	Von Bargaen	On schedule	On schedule
				Fleet Services – Heavy Equipment (General Purpose)	Von Bargaen	On schedule	On schedule
		i Fleet Services – Light Equipment (Hanford Patrol)		Von Bargaen	On schedule	On schedule	
				Fleet Services – Light Equipment (Hanford Fire)	Von Bargaen	On schedule	On schedule
				Fleet Services – Light Equipment (Special Purpose Trucks)	Von Bargaen	On schedule	On schedule
		j IT - Cyber Security – System Patching		Eckman	On schedule	On schedule	
		k PFP Support - Loaned Labor		Brockman	On schedule	On schedule	
		l Public Works - Maintenance Backlog		Metzger	On schedule	On schedule	
		m RSS - Dosimetry External Services		Wilson	On schedule	On schedule	
		n RSS - Instrument Calibration		Wilson	On schedule	On schedule	
		o Spent Fuel Activity Support - Loaned Labor		Von Bargaen	On schedule	On schedule	
p Water – Potable	Synoground	On schedule	On schedule				
	Water – Raw	Synoground	On schedule	On schedule			
1.1.2	Implement FY17 actions per the approved schedule of the MSC-PLN-ENG-56352 <i>Maintenance Management Program Management Plan</i> , Rev 2 and HNF-56046, rev 5, <i>MSA Maintenance Management Program Five-Year Plan</i> .	9/30/2017	Metzger	On schedule	On schedule		
1.1.3	Transition Public Works Maintenance Backlog process to required Deferred Maintenance Management process.	9/30/2017	Synoground	On schedule	On schedule		
1.1.4	Complete approved project investment portfolio elements as measured by the cost/schedule performance index, which is calculated as (CPI + SPI)/2.	9/30/2017	Von Bargaen	On schedule	On schedule		

### LEGEND

= On schedule

= Complete

= In jeopardy

= Objective missed

= N/A



Table 11-1, cont. Performance Evaluation and Measurement Plan.

September FY 2017 2017 Performance Evaluation and Measurement Plan						Status	
Deliverables			Plan	MSA	YTD	SEP	
<b>2.0 Efficient Site Cleanup</b>							
2.1 Demonstrate MSA's responsiveness and alignment of resources and equipment to meet the cleanup contractors' project requirements in support of key milestones.	2.1.1	Maximize efficient MSA use of resources to meet the other Hanford contractors' changing project needs.	9/30/2017	Von Bargaen			
	2.1.2	Demonstrate consolidation of the Hanford Site infrastructure footprint to the 75-square miles of the Central Plateau. Submit a plan and schedule for approval by 10/15/16 and implement FY17 actions per the approved schedule.	9/30/2017	Synoground			
	2.1.3	Demonstrate effective safety and quality management to include, but not be limited to, a robust Contractor Assurance System.	9/30/2017	Jensen			
	2.1.4	Demonstrate effective Hanford Site integration to include, but not limited to, identifying longstanding or emerging issues that affect efficient site operations and provide recommendations for improvement (e.g., WTP integration, WCH transition, contract re-alignments, etc.).	9/30/2017	Von Bargaen			
	2.1.5	Apply disciplined work controls to Fire Systems Maintenance by fully emulating Phoenix to maximize safety, compliance, and integration with OHCs for site fire systems.	9/30/2017	Walton			
	2.1.6	Provide Hanford contractors with integrated tools to maximize "wrench time."	9/30/2017	Metzger			
<b>3.0 Comprehensive Performance</b>							
Execute the balance of contract work scope within the contract requirements, terms, and conditions, demonstrating excellence in quality, schedule, management, cost control, small business utilization, and regulatory compliance.			9/30/2017	Wilkinson			
Provide leadership to improve management effectiveness and collaborate and participate proactively with customers.							
Work with DOE and the other Hanford contractors in a spirit of cooperation to demonstrate operational excellence to include, but not limited to, the following areas:							
o Business and financial management using approved purchasing, estimating, property, budget, planning, billing, labor, accounting, and performance measurement systems, providing visibility and transparency to DOE with respect to each of the foregoing							
o Contract change management and subcontract administration and consent activities, e.g., proposal review and negotiation process, including timely and adequate submission of proposals and requests for additional data, timely counteroffers, and attaining small business goals							
o Safeguards and security, fire department operations, emergency response, and emergency operations/emergency management							
o Land Management							
o Infrastructure and services program management, operations and maintenance							
o Effective contractor human resources management							
o Problem identification and corrective action implementation							
Performed work safely and in a compliant manner that assures the workers, public, and environment are protected from adverse consequences.							

NOTES: P.I. 2.1.3: Metric completed as of May 22, 2017.

**LEGEND**

- = On schedule
- = Objective missed
- = Complete
- = N/A
- = In jeopardy

## 12.0 CONTRACT DELIVERABLES STATUS

The following itemizes the contract deliverables due to RL in September:

Table 12-1. September 2017 Contract Deliverables

CDRL	Deliverable	Responsible	Date Due	Date Submitted to DOE	Action	Response Time	Date Due from DOE	Date Approved by DOE
CD0123	Monthly Billing Reports for DOE Services - Aug	Eckman	9/5/17	9/5/2017	Information	N/A	N/A	N/A
CD0144	Monthly Performance Report - Jul	Olsen	9/10/17	9/6/2017	Review	None	N/A	N/A
CD0003	Infrastructure and Services Alignment Plan (ISAP)	Synoground	9/22/17	9/21/2017	Approve	30 days	10/21/17	
CD0009	Patrol Sensitive Equipment/Items Report	Walton	9/30/17	9/22/2017	Review	45 days	11/7/17	
CD0021	Hanford System Security Plan (SSP)	Walton	9/30/17	9/28/2017	Approve	45 days	11/13/17	
CD0063	Hanford Site Annual Environmental Report	Wilson	9/30/17	9/27/2017	Approve	90 days	12/27/17	
CD0084	Bonneville Power Administration (BPA) Power and Transmission Service invoice verification and breakdown of site contractor costs - Jul	Synoground	9/30/17	9/22/2017	Review	30 days	10/22/17	
CD0104a	Annual Update to HNF-56046 MSA Maintenance Management Program Five-Year Plan	Metzger	9/30/17	9/25/2017	Review	N/A	N/A	N/A

**NOTE: Areas shaded in gray indicate delivery to DOE, and when the "Date Approved by DOE" is shaded, approval has been received in return. "Review" responses from DOE are not documented with dates, but shaded when complete.**

IAMIT = Interagency Management Integration Team.

TPA = Tri-Party Agreement.

N/A = No action.





## 12.1 GOVERNMENT-FURNISHED SERVICES/INFORMATION AND DOE DECISIONS

In July 2017, the agencies of the Hanford Federal Facility Agreement and Consent Order (DOE, the U.S. Environmental Protection Agency, and the State of Washington, Department of Ecology) agreed to waive the requirement for the M-036-01H milestone, which directs submittal of the *2018 Hanford Lifecycle Scope, Schedule, and Cost Report* (Lifecycle Report), thus effectively canceling the need for the two Government-Furnished Services and Information (GFS/I) items originally due to MSA in 2017:

- GF0049, due June 1, 2017: DOE to provide a Hanford “planning case” budget to prepare the *DRAFT Hanford Lifecycle Scope, Schedule, and Cost Report*, and
- GF0050, due October 31, 2017: DOE approval of the *DRAFT Hanford Lifecycle Scope, Schedule, and Cost Report* (Lifecycle Report).

Submittal of the Lifecycle Report (and the above two GFS/I items) will once again be required for FY 2019.



## 13.0 SELF-PERFORMED WORK

Table 13-1. Mission Support Contract Socioeconomic Reporting.

Plan Category	MSA Goal	FY 2017 Actual To-Date	Cumulative %
Small Business	50.0%	86.3%	57.6%
Small Disadvantaged Business	10.0%	19.7%	16.3%
Small Women-Owned Business	6.8%	22.6%	12.7%
HubZone	2.7%	14.3%	5.2%
Small Disadvantaged, Service Disabled	2.0%	17.2%	5.7%
Veteran-Owned Small Business	2.0%	16.1%	7.0%
Local Small Business	Highest Preference	58.0%	-

Through September 2017

### Prime Contract Targets:

- At least 40% contracted out beyond MSA, LLC = 46% (\$1.506B/\$3.282B)
- Small Business 25% of Total MSC Value = 26% (\$0.867B/\$3.282B)